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ABSTRACT

This conference was designed to explore the many issues concerned with quality and assessment at the master's level. Areas covered included needs and objectives, curriculum design and delivery, the meaning of quality, extant standards of quality for accreditation, definitions of assessment and methods of assessment for master's programs. Over two hundred individuals participated in the conference and this volume is to some extent a reflection of all discussions and comments. It contains the texts of invited papers as well as available reports of recorders who summarized all panel sessions. Three papers presented on the last day attempt to provide an overall summary of the conference. They are "Status of the Master's Degree Program" by K. D. Stewart, "What Responses are We Making?: Quality Assessments of the Quality of Master's Programs" by J. Epstein, and "What Does the Future Hold?" by D. A. Mankin and M. A. Grodsky. (RL)

THE ASSESSMENT OF QUALITY OF MASTER'S PROGRAMS

March 1-3, 1979

at

University of Maryland University College
Center of Adult Education
College Park, Maryland

Jointly Sponsored By:

Commission on Higher Education of the
Middle States Association of Colleges and Schools

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PROCEEDINGS

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Introduction

This volume contains the Proceedings on the Conference on the Assessment of Quality of Master's Programs, which was held March 1 to March 3, 1979 at the Center of Adult Education of the University of Maryland University College in College Park, Maryland. The conference was jointly sponsored by the Commission on Higher Education of the Middle States Association of Colleges and Schools, the Council of Graduate Schools in the United States and the University of Maryland University College.

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Over two hundred individuals participated in the conference and this volume is to some extent a reflection of all discussions and comments. It contains the texts of invited papers as well as available reports of recorders who summarized all panel sessions. The last set of papers by Drs. Epstein, Grodsky, Mankin and Stewart is an attempt to provide an overall summary of the conference and was held on the last day. The first volume of contributed papers was made available to the participants of the conference.

I would like to express my appreciation to all who participated in the conference and in particular to Ms. Nancy Hedberg who codified the papers for this volume.

Milton A. Grodsky (ed.)

MILTON A. GRODSKY
Conference Chairperson
University of Maryland
University College

May 1979

The Assessment of Quality of Master's Programs

Kenneth E. Young
President, The Council on Postsecondary Accreditation

March 1, 1979

When I was doing graduate work at Stanford University, my major professor, the late W.H. Cowley, used to drum into his students that old caution: "Tell them what you are going to say, say it, then tell them what you said." So let me start right off by letting you know what major points I hope to make. That way, perhaps we can avoid the problem that occurs after so many speeches, when someone who has skipped the meeting asks, "What did he say?" and gets the answer, "He didn't say."

Therefore, if you doze off during the duller parts of my presentation, you only need to remember the following:

- The master's degree lacks common definition. Even various kinds of master's degrees are not commonly defined.
- Even so, we can assess the quality of individual degrees. However, this requires that institutions make clear what it is they expect of a degree holder.
- The role of accreditation in the assessment of quality is to assist institutions in developing and evaluating their educational objectives and in validating this process.

Now that you have had the Reader's Digest version of the speech, happy dreams.

From Harvard's founding in 1636 until the Civil War, American colleges for all practical purposes awarded only the baccalaureate degree (and that was just the Bachelor of Arts degree until the middle of the nineteenth century, when the Bachelor of Science degree came upon the scene). Earned graduate degrees did not appear in the United States until the last half of the nineteenth century. (The Master of Arts degree was given earlier, but only as a matter of course to B.A. recipients who managed to stay out of trouble and who were willing to pay an additional fee.) The founding of Johns Hopkins University in 1876 ushered in the development of the American university and the awarding of earned graduate degrees.

Today over 200 different kinds of master's degrees are offered, and each year more than 300,000 individual master's degrees are awarded. The master's degree is now recognized as the initial postbaccalaureate degree in both liberal arts and professional fields. The master's degree, however, appears to be in serious difficulty. Critics, and even presumed friends (for example, the graduate deans) are questioning the meaning, the value, and the quality of the master's degree. At its 1977 meeting, the Council of Graduate Schools in the United States held workshop sessions on "Probing the Master's Degree" and "Assessment of Quality in Master's Degree Programs." Typical of the comments made at those workshops were the following:

- "Something must be wrong with the master's degree....The topic keeps coming up, with predictable regularity, wherever the faithful are gathered--nationally, regionally, or by discipline. It is dragged out, thrashed moderately (but not usually thoroughly), and then returned to its 'business as usual' status. The fact that we seem unwilling to desist from this exercise suggests that something is wrong indeed." (Eugene S. Piedmont.)
- "So what is the master's degree for? If not preparatory, then terminal? And if terminal, then what should the degree do and be for its holder?" (Louis G. Pecak.)
- "As we all well know, it has long been claimed that the master's degree has lost value and prestige, and that it must be rehabilitated if it is to have meaning. Perhaps it would be more accurate to say that the traditional Master of Arts and Master of Science have lost their value as credentials for college teaching." (Etta S. Omat.)
- The master's degree "has so many variations, is unique in so many respects, and is sought after for so many different reasons." (Carl J. Schneider.)

The criticisms of the master's degree can be listed as follows:

- The master's degree serves no essential, central social purpose (although it is being utilized in a variety of ways).

- The master's degree bears so many different names and plays such a variety of roles that it has no common meaning. Even specific kinds of master's degrees do not always represent common requirements or standards.

- The individual master's degree does not usually tell much of anything about the competencies of the holder of the degree.

- The circumstances under which the master's degree is awarded often lack assurances as to the quality of the education it supposedly represents (and I will have more to say about this matter later).

Leaders in higher education also express concern about certain conditions and trends that do not appear to bode well for the future of the master's degree; for example:

- Graduate/research universities that focus primarily on the doctorate tend to view the master's degree as a handmaiden to the higher award. They use the master's degree as a mid-point incentive or reward for students embarked on the long trek toward the doctorate and as a consolation prize for those who never quite made it. And for the very best students, they often encourage them to skip the master's degree entirely.

- Institutions that are basically baccalaureate degree-granting colleges tend to seek or retain authority to grant the master's degree as a symbol of academic respectability, as an important indicator that they, too, are capable of carrying out a graduate-level function.

- For teachers, civil service workers, military personnel, and others in occupations or professions where the baccalaureate degree is an entry-level requirement, the master's degree often is used as the basis for salary increases and promotions. And certain occupations are making the master's degree a prerequisite for employment.

- In a society where the bachelor's degree is awarded to an ever-increasing percentage of the population, the master's degree is turned to as a way of establishing a higher level of academic selectivity.

- A growing number of noncollegiate entities (hospitals, business-related institutions like the Rand Corporation and Arthur D. Little, and military operations such as the Naval Postgraduate School) now offer graduate degrees.

- Many nontraditional institutions relatively new on the scene (for example, Nova University) offer graduate degrees; and a large number of so-called traditional institutions (such as the University of Southern California, the University of Oklahoma, and -- yes -- the University of Maryland) sponsor extensive off-campus programs at the graduate level.

- The decline of the age cohort that traditionally made up the bulk of undergraduate enrollments, the continuing effect of inflation, and the levelling off or decline of state and federal funding all combine to put pressures on institutions to increase graduate enrollments and to avoid admissions, grading, and graduation practices that might adversely affect enrollments.

- The movement of states to require relicensing for many of the professions and to tie mandatory continuing education to relicensing is bringing to campuses many professionals motivated by the need to maintain their licenses.

Individuals, educational institutions, professions, and employers thus have defined, or will define, their own uses for the master's degree. These uses impute meaning and value to the degree that may or may not be there. And some of these uses of the degree actually may serve to work against the possibility that the degree will have a common purpose or represent valid and reliable academic standards.

The Master's Degree, the policy statement issued by the Council of Graduate Schools in December, 1976, describes the degree in the following ways:

> "The master's degree customarily is awarded to an aspirant who achieves a level of academic accomplishment substantially beyond that required for the baccalaureate degree. The master's degree program should consist of a coherent pattern of courses frequently capped by comprehensive examinations and a thesis or its equivalent in a creative project. Ideally, all master's programs should include an opportunity for the student to learn to present information in written and oral form to a variety of audiences...
>
> "The master's degree program consists of a pre-planned and coherent sequence of lectures, seminars, discussions, and independent studies or investigations, designed to give the student the opportunity to learn from original sources in the library, from studies conducted in the laboratory, through creative scholarship (whether research or professionally oriented) and through research or professional practice in the field."

The important phrases appearing in that statement, it seems to me, are:

. Postbaccalaureate

. Pre-planned

Coherent pattern or sequence,

. Learn from original sources, and

. Creative project or scholarship

The period of study for the master's degree varies from one to two years. About half of the typical master's program is devoted to required core courses in the field; study outside the major field is not normally required. A liberal arts or research-oriented master's degree is identified as either a Master of Arts or a Master of Science (and we have no meaningful distinctions between these two degrees anymore). In professional fields, the degree title usually is modified by an additional phrase (the Master of Arts in Library Science) or it may carry a separate professional designation (the Master of Public Administration).

The research-oriented master's degree has been directed mainly to the acquisition of knowledge and, to a somewhat lesser extent, to the organization and dissemination of knowledge. The master's degree in this pattern divides into three types, depending upon the intent of the student and the relationship of the degree to the doctorate. For some students pursuing the doctorate, the master's may be (1) a way station toward the terminal degree, (2) a consolation award for those terminating before achieving the doctorate, or (3) a terminal degree adequate for teaching at the secondary school or perhaps other levels. Generally, the M.A. and M.S. degrees, in and of themselves, assure no marked capacity in research; but they may enable an individual to assist others engaged in research activities.

The practice-oriented master's degree, depending upon the professional field, may represent the entry level into the profession, preparation beyond the entry level (where the bachelor's degree is considered adequate for that purpose) or a mid-point toward a terminal professional degree (where the doctorate is required).

We must begin by recognizing that criticism about the loss of common meaning for the master's degree is a criticism that can be applied to all academic degrees. John Morris and William Troutt in the recent book, Credentialing Educational Accomplishment, wrote:

"The most striking observation about our current degree structure is that today's degrees convey no standard meaning beyond being general statements of intellectual interests and time spent in study. The evolvement of our system of educational credentials reveals a gradual diffusion of what it means to be a college or university graduate. Degrees appear to be functioning less and less as commonly understood indicators of individual academic accomplishment and competence."

Last year, the Task Force on Educational Credit and Credentials of the American Council on Education produced its final report after two years of study. The Task Force determined that the basic system of credit and credentials for postsecondary education in the United States should be retained. The Task Force also recognized the futility of attempting to give common national meaning to all baccalaureate degrees or all master's degrees or all doctoral degrees. It recommended, instead, that each credential-granting institution should clearly define, to the extent possible, the meaning of the degrees it awards. The Task Force said:

"Given the educational and social uses of educational credentials, institutions should seek to improve the quality of information conveyed by the credentials they confer. Degree designations and a transcript listing of course titles and grades fall short in meeting today's needs for accurate and adequate information on the qualifications of credential holders.

"Narrative definitions would adequately meet the needs of employers and other users and, over the long run, would be worth the effort and resources required to formulate the statements. If the certificate or the degree is directly related to qualifications for employment, the definition should set forth, to the extent possible, the competences certified by the credential. All degree definitions should directly address the levels of the analytical, communication, quantitative, and synthesizing skills attained.

"The specificity of definitions will, and should, vary by program. In some cases, an appropriate response may be a narrative description which defines a program of study that the holder successfully completed; in other cases, very specific statements regarding the student's competences may be possible and desirable."

The Task Force went on to recommend that the postsecondary education community "should work toward common meanings...for degrees that are in the same areas of specialization and at the same level of accomplishment."

Thus when we talk about assuring the quality of the master's degree, we are talking about various kinds of master's degrees or even specific master's degrees, and not the generic term. Quality assurance involves interrelated institutional responsibilities and accreditation responsibilities.

Institutional role:

An institution of higher education is more likely to offer a master's degree of quality if it has:

- Clearly stated educational objectives appropriate to post-baccalaureate education;
- Valid and reliable means for evaluating success in achieving those objectives;
- A faculty that played a major role in shaping the objectives, that wishes to help students achieve them, and that is qualified to do so;
- Students who see the objectives as closely corresponding to their own educational and/or career goals and who have the necessary ability and preparation to begin graduate-level learning of the kind specified; and
- An adequate environment and resources necessary to support the learning process.

Notice that I said that an institution is "more likely" to offer a master's degree of quality if these conditions prevail, not that quality thus will be assured. It is of course possible, but highly unlikely, that quality will occur more than occasionally in institutions lacking the characteristics cited. But the mere presence of these elements guarantees nothing except that: (1) appropriate learning is more likely to occur and, more significantly, (2) it will be much easier to determine whether that indeed has happened.

Role of accreditation:

The higher education community recognizes the following purposes of accreditation.

- The fostering of excellence in postsecondary education through the development of criteria and guidelines for assuring educational effectiveness.
- The encouragement of self-improvement through continuous self-study and assessment.

- Assurance to the higher education community, the general public, and other agencies or organizations, and to itself that an institution or program has clearly defined and appropriate objectives, has the resources for reasonable assurance of the attainment of stated objectives, and is making a continuous effort to produce evidence of the attainment of its objectives.
- Provision of counsel and assistance to developing institutions and programs.
- Encouragement of diversity, experimentation, and innovation within the boundaries of generally accepted standards and guidelines of academic quality.
- Protection of institutions against encroachment which might jeopardize educational integrity or academic freedom.

In order to implement these purposes and in order to best serve the general interest and welfare of the public, it is recommended that:

- The review and appraisal of graduate degree programs should be included as part of the institutional accreditation of a college or university.
- Programmatic accreditation should be considered appropriate primarily for practice-oriented fields, particularly those which focus on the protection of the health, safety, and well-being of the public.
- The granting of institutional accreditation should take cognizance of, but need not require, specialized accreditation of individual graduate degree programs.
- Accrediting agencies in their requirements and procedures should avoid placing an excessive burden upon an institution or program.
- Institutional and specialized accrediting agencies should continue to explore more effective means for interaction and cooperation.
- Institutional and programmatic accrediting agencies should be prepared, in all instances, to justify their requirements and activities as expressions of concern for educational quality and public interest.

Existing Programs. In institutional accreditation, all graduate programs are considered to be vital and integral components of the institution and are included within its comprehensive evaluation. In specialized accreditation, the graduate program is viewed in depth as well as within the context of the total institution. In both instances, the

evaluation and accreditation process typically consists of: (1) an intensive self-analysis by the institution or program; (2) an on-site visit by an evaluation team of peers; and (3) a judgment of representatives of the community of interests sitting as a decision-making body.

In order to be of maximum benefit to the institution and program, the content of the self-study should be introspective and analytical rather than merely descriptive. A primary focus should be upon the determination of quality through an assessment of outcomes, i.e., the evidence which the institution/program is producing or seeking to produce concerning the attainment of its stated objectives. For a graduate program, such evidence might appropriately include: (1) student and alumni evaluations of their programs and courses; (2) longitudinal studies of the professional performance of graduates; (3) data concerning the continuing scholarly productivity of graduates; and (4) such other information congruent with the stated objectives of the program and institution.

The second part of the evaluation process is the on-site evaluation visit by a team of peer representatives from other institutions and, in the case of specialized agencies, from the professions. The team's major function is to make a considered group judgment, as informed colleagues and professionals, on the education effectiveness of the institution and/or program. In order to assure that the graduate program(s) receive proper attention during this phase of the process, it is strongly recommended that each regional team visiting an institution with substantial graduate offerings should include a person competent to appraise the organization and administration of graduate study within the context and structure of the total institution. It is further recommended that all regional team members representing academic disciplines or specialized fields include the assessment of graduate programs in their specializations as part of their evaluation responsibility.

The various accrediting agencies publish standards and guidelines for use in the assessment of graduate programs. Today, most of these are expressed qualitatively rather than quantitatively as in the past. They usually recommend consideration of the following aspects of graduate study:

- Clarity and appropriateness of objectives;
- Identity of the graduate and professional programs as administrative units;
- Qualifications of the faculty;
- Design and content of the graduate program;
- Appropriateness of admission, retention, and degree requirements;
- Policies regarding academic credit by transfer, life experiences, or other non-traditional activities for the curricular components of the graduate program;

- Policies and requirements for off-campus or extension centers;
- Adequacy of supporting resources;
- Interaction and interrelation with the undergraduate programs;
- Evidence of educational outcomes.

New Programs. Graduate degree programs initiated subsequent to the most recent accreditation should not be automatically included in that accreditation unless it is clear that there is no substantive change involved. It is recommended that each accrediting agency develop a statement of policy and procedure for the approval of new programs. In general, each agency should receive an institution's notice of intent prior to the introduction of the program. If the proposed program is closely allied to existing graduate offerings, the notice of intent may consist of a brief description of the proposed program or it may be a duplicate of the planning document prepared for approval by the institution's governing board or state agency.

If the proposed program is: (1) at a higher degree level; (2) in a totally different field; (3) at an off-campus location; or (4) requires a significant increase in resources, a more detailed notice of intent is appropriate. It is suggested that this document include such data as: (1) evidence of need for the program; (2) adequacy of faculty, library, and research resources; (3) outline of degree requirements; and (4) plans for the evaluation of educational outcomes.

The accrediting agency should review the educational nature of the proposal as well as its potential impact on related programs and the total institution. The accrediting agency should notify the institution whether its accreditation will be extended to include the new program or whether additional information, an on-site evaluation, or other measures will be required.

Programs at Separately Accreditable Units. When an institution conducts graduate programs in a variety of locations or through a number of discrete units, it will be expected to consult the appropriate accrediting agencies concerning the manner in which evaluation will be conducted and accreditation designated.

Graduate programs offered at a separately accreditable unit located outside the geographical region of the parent institution should normally be included in the accreditation of that unit by the regional accrediting agency responsible for that location. Communication and interaction between involved agencies are, of course, essential.

In the review of graduate programs at units not separately accreditable but conducted by an institution outside its own accrediting region, representatives of the agency in that region should be invited to participate in any on-site evaluation conducted by the accrediting agency of the region in which the parent institution is located.

Policies concerning the quality of education and related matters such as advertising, dues, fees, and related matters pertaining to graduate programs offered at off-campus centers should be consistent with the policies of the responsible accrediting agencies with respect to such centers.

In his book, Zen and the Art of Motorcycle Maintenance, Robert Pirsig tells the story of a man's quest after that elusive concept -- quality. The seeker finally learns, as all of us must, that quality (also love and beauty and other similar ephemeral phenomena) cannot be defined. Nor can it be measured. We almost always can recognize it, however, when we happen to stumble across it. My remarks today are intended to suggest that we will find quality much more often if we do less aimless stumbling and pursue more purposeful planning.

A master's degree should attest the completion of a coherent program of specialized study beyond and resting upon the baccalaureate, under the direction of scholars who are in full command of the subject.

Institutions which have the faculty and resources to offer such work in related fields without impairing their undergraduate programs are well advised to do so. Others are not. An institution's prestige and effectiveness are determined more by the quality than by the diversity or academic level of its offerings.

Types of Programs and Degrees

Master's degree programs are identifiable by their primary objectives as belonging to one or the other of two general types. The immediate purpose of one type is advanced study in a particular discipline. The immediate purpose of the other is the application and extension of previous studies to professional or vocational ends. It is important to distinguish between them, for the two kinds have differing requirements and in many particulars are not comparable.

a. A master's degree program of the first type centers in advanced studies in an academic discipline, as, for example, history, physics, and sociology, or in interdisciplinary studies. The objective is knowledge of the subject rather than its application to professional use. Although the program may be complete in itself, it may also be designed as preparation for doctoral studies. Award of a master's degree should express the judgment of the faculty that the recipient has an appropriate background for doctoral study in the field, but not necessarily the potential for successfully completing it.

   The Middle States Commission considers Master of Arts and Master of Science degrees without specific designation of discipline appropriate for this type of program.

b. A master's program of the second type is professionally or vocationally oriented, as normally it would be in engineering, for example, or in law, applied music, teaching, or in a discipline in preparation for teaching. While such a program should be complete in itself, it

may also prepare for doctoral study in a professional field. The degree should indicate that in the judgment of the faculty one has attained specialized competence which qualifies the recipient for superior performance or for teaching in a particular area.

The Middle States Commission considers only specialized degrees, such as Master of Business Administration, Master of Arts in Education, Master of Engineering, or Master of Arts in Teaching appropriate for this type of program. The Commission favors the use of standard degree terminology.

Graduate instruction needs its own organization and administration, and conditions which favor consistent, long range development. Faculty members who have instructional or counselling responsibility in master's degree programs should hold academic qualifications beyond the level of that program or unassailable compensating qualifications, would be productive contributors in the field of their own specialty and participants in its professional life, and should be permitted to work under conditions and loads which encourage them to continue developing professionally.

Counselling and personal instruction are time-consuming aspects of graduate teaching. So are continuous study and professional experience in the teacher's field which good scholarship requires.

Very small departments ought rarely undertake master's work. Several instructors with complementary specializations are needed to provide differing points of view and a variety of offerings, and to aid in supervising and examining the students. It is desirable, for the same reasons, that master's work should be available simultaneously in several related departments rather than in one alone.

Students

Admission to graduate study should require evidence that the applicant has the ability, preparation, aptitudes, and skills which are needed for successful work in the program to be undertaken. Advancement to degree candidacy should be a second step, carefully considered and based on the student's actual performance in the program.

Command of appropriate scholarly tools, such as languages, statistics, or laboratory techniques should be expected early, so that the student may use them during the program.

Structure

Master's degree programs need not conform to any fixed pattern. The requirements for a degree should be governed by its objectives, taking into account the principles that:

a. A candidate's work should be planned as a whole, with sequence and focus aimed at objectives which have been defined in advance. Satisfying requirements must not be simply a matter of aggregating available courses.

b. A substantial proportion of the courses acceptable toward the master's degree should be designed explicitly for graduate students, although properly qualified undergraduates need not be excluded from them. Undergraduate introductory courses in the principal field should not be counted toward the master's degree. Introductory courses in ancillary fields may be acceptable if they are pertinent to the program's objectives; any use of undergraduate courses for graduate students, however, must be carefully justified and controlled.

c. The decisive factors in qualifying for a master's degree should be the quality of a student's performance and the level of achievement; the time spent or number of credits accumulated of less importance. The number of courses or credits required of individual candidates may vary, depending upon their preparation and objectives. Some period of full-time study is desirable.

   Bachelor's and master's degrees may be conferred together if each is earned under proper conditions.

d. It is important to ensure depth and perspective in the program as a whole. Comprehensive examinations, theses, and a variety of special projects can help do so.

   A comprehensive examination is not based principally upon the courses a candidate has taken, but upon the knowledge and skills one is expected to have in the field concerned, however obtained. An independent project can provide an opportunity for the student to master a segment of the subject and to express such mastery in lucid terms. The form of the project will depend upon the nature of the field; it might be, for example, a thesis, a series of demonstrations or an artistic or professional creation or performance. It should be a principal feature in the degree requirements, critically evaluated.

Resources

Library, laboratory, and other educational facilities for a master's degree program should be of a quality judged satisfactory by established scholars in the field and fully accessible to the students.

Graduate study, even more than undergraduate, is dependent upon the library. Graduate work requires substantially richer resources. Not only must the advanced courses be supported with a greater number and more specialized kinds of books, monography, source materials, periodicals, and reference works in the fields of instruction and related areas, but the background material for many special investigations will be demanded too. Lack of substantial library resources or failure to use them well condemns a program to mediocrity.

Costs

Master's degree work is expensive for any institution. A governing board needs complete and realistic financial information not only before authorizing a graduate program, but also continuously thereafter in sustaining it. Fees for master's work are unlikely to cover its cost if desirable teaching loads and class size are to be maintained; especially is this so if expensive equipment is required. Salary and library budgets are markedly increased. Any institution considering master's degree programs should be prepared to give evidence of its awareness of the demands offering such programs will place on its resources.

Off-Campus Programs

Off-campus master's degree programs present formidable difficulties, for the instruction and resources offered graduate students in extension courses should be educationally equal to those enjoyed by resident students in similar courses.

One safeguard for the quality of off-campus courses is to have them set up, controlled, and supervised through the same departmental, faculty, and administrative channels as other courses, and taught as part of normal faculty loads. Assigning graduate extension courses as additional work for extra pay is questionable in any but exceptional and temporary circumstances. The use of part-time instructors needs to be justified on educational grounds, and their qualifications should be equivalent to those of the full-time staff.

Extension graduate courses require the same preparation as their campus counterparts. Essential library resources must be available for extension students at times and in places which favor their use. It is not sufficient to bring books from the campus collection, to depend on local public libraries, or to expect extension students to travel to the campus library when the course itself has to be brought to them.

Interinstitutional Programs

Consortiums and cooperative programs among institutions are particularly desirable in master's work. They present opportunities for sharing resources and offering programs particularly attuned to local or regional needs. The Commission strongly endorses such interinstitutional arrangements.

Session I

Needs and Objectives of Master's Programs--I

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The papers presented in this session, representing two different perspectives, point quite distinctly to the nature of the challenge facing master's degree programs in the years ahead. In an era of declining resources and of increasing pressures from non-traditional students for professional training, both participants suggest, educators must exercise care and creativity in order to maintain the quality and the research orientation of the traditional master's degree.

Dr. Robert K. Armstrong, Manager of College Relations for the E. I. Dupont de Nemours Corporation, represents a company which numbers among it 140,000 employees worldwide 20,000 college graduates. A chemist, Dr. Armstrong is concerned with developing and evaluating education programs to meet the needs both of his company and of the industry at large. He is therefore in an excellent position to provide an overview of the needs and objectives of master's programs in business and in the sciences, or, as the title of his presentation puts it, to offer "A Perspective on the Master's Degree as Industry Sees It." His views, and the facts on which they are based, are of interest both to educators involved with master's degree programs, and to students who view the master's degree as a means of professional advancement.

Of the 20,000 college graduates employed by Dr. Armstrong's company, 80% hold degrees in business, chemistry, engineering, or other technical fields. About one-sixth of these (approximately 3,400) hold master's

degrees, and an equal number hold the Ph.D. Among the master's degree holders, engineers make up the largest number (1,600); holders of business degrees comprise the next largest number (850), with chemists next (500), and the remainder (450) in other technical fields.

Although Dr. Armstrong expressed an awareness of the value of the master's degree program as a kind of pre-selection process for potential company employees, and spoke of institutions offering master's programs in relevant fields as good territories for recruiting, he nevertheless reported that his company does <u>not</u> differentiate between bachelor's and master's degree holders in its hiring practices, and that holders of the master's degree are not specifically sought out. Furthermore, with the exception of those who earn the MBA, Dr. Armstrong reported, Dupont employees who take master's degrees do not do significantly better in terms of advancement within the company than do those employees who do not continue their educations beyond the baccalaureate degree. This observation, Dr. Armstrong stressed, is merely a statement of a condition, not an indictment of master's degree programs. Indeed, according to Dr. Armstrong, the Dupont Corporation supports higher education through scholarship and research grants amounting to roughly fifty-five million dollars, and encourages the educational advancement of its own employees through its tuition refund program.

The apparent inconsistency in the company's position--that it helps employees to obtain the master's degree even though it does not find that the degree itself gives one employee a significant advantage over another--was not addressed directly either in Dr. Armstrong's presentation or in questions from the floor. Yet in the discussion following his talk Dr. Armstrong expressed certain attitudes and opinions which, taken together, help to explain more fully and clearly industry's stance with regard to

the needs and objectives of master's programs. In response to specific questions, Dr. Armstrong indicated that he values traditional degree programs in disciplines related to his industry's needs over innovative, interdisciplinary programs such as one, for instance, combining courses in business administration with courses in chemistry. Industry's needs, he suggested, are best met by persons coming out of well-established disciplinary programs in chemistry, engineering, and business. Programs which have a practical, work-related component, however (such as the M.S. in Industrial Chemistry or the Master of Chemical Engineering program at M.I.T., combining a year of course work with a year of training at an industrial site), are well thought of within the industry. Agreeing with an observation from the floor that industry tends to compete with graduate schools for the best bachelor's degree recipients, Dr. Armstrong pointed out that of the advanced degrees currently being awarded in engineering, 28% of the master's degrees and 33% of the Ph.D.'s are earned by foreign nationals. There is an on-going need, he stressed, for re-training of professionals already working in industry in the United States, and especially for cooperation between industry and graduate research institutions in seeking long-range solutions to pressing problems.

It would seem, therefore, that although the master's degree is <u>in itself</u> not regarded by industry as an automatic key to individual professional advancement, the training and research required for the attainment of the degree are valued as contributing to necessary progress and growth <u>within</u> the industry. To this end, the emphasis in master's degree programs for employees in industry should be on <u>quality</u>, on a thorough, traditional foundation in the discipline with, perhaps, some applied experience in an appropriate industrial setting.

Quality is also the main concern of Dr. Thomas J. Hegarty, Vice President for Academic Affairs at the State University of New York College at Potsdam, who spoke on "The Value and Meaning of Part-time Master's Programs." Pointing out that in 1977 part-time students became for the first time a majority of all students enrolled in graduate programs, Dr. Hegarty alluded to the controversial nature of many new, alternative programs for part-time and non-traditional students, saying, "The fundamental issue has become whether external pressures brought to bear on individuals to gain graduate credits or degrees should be a clarion call to colleges to create loosely-structured part-time degree programs." Dr. Hegarty then outlined eight steps by which institutions offering part-time graduate programs might "anticipate and satisfy justified concerns over quality."

The first of these steps, it seems, is one under which all the others might be subsumed: the institution must make sure that its part-time programs fit its overall mission and goals, so that there can be a strong institutional commitment to such programs. That commitment, then, will be reflected in course sequences which take into account the stop/start pattern of part-time student enrollments; in courses scheduled at hours which will fit working schedules; in the development of new course formats, including the possible use of some programmed learning and videotape courses; and in the re-interpreting of residency requirements. Costly but crucial commitments, Dr. Hegarty believes, include the decision to keep selected academic support services open during the evenings and weekends, and to make sure that faculty teaching in part-time programs will be the same (or at least of the same level of quality) as faculty teaching in the full-time program. Then, although the traditional research component of the master's degree may be supplemented or partially replaced in part-time programs by carefully designed internship or public service components, great care must be taken to weigh the convenience of off-campus courses judiciously against the students' need to be near laboratories and libraries. Although the stress in Dr. Hegarty's approach to part-time graduate education is definitely on quality, however, another, related, keystone of his program design was made manifest in his response to a question from the floor. Asked how the needs of the part-time student, with his or her inevitable stop/start, sometimes lengthy progress toward a degree, could be accommodated to the occasionally necessary changes in the curriculum, Dr. Hegarty answered, "With a great deal of tolerance."

Despite the different perspectives of the employer and the educator, then, Dr. Armstrong and Dr. Hegarty agree on the importance of maintaining a high level of quality in master's degree programs, and both seem to believe that quality is consistent with programs having an applied as well as a research component, and with programs for part-time students, provided the commitment to quality is made. Although graduate students and their employers, actual or potential, may have different perceptions of the professional value of post-baccalaureate education, it would seem to be the obligation of educators to be aware of the needs of both groups, to advise students realistically, and to design graduate programs which meet society's continued need for well-trained, thoroughly disciplined specialists.

NEEDS AND OBJECTIVES OF MASTER'S PROGRAMS II

Herschel H. Griffin
University of Pittsburgh

The central focus of the three papers which guided the discussion was the nature and function of master's programs. In particular, they were concerned with the identity crisis of such programs associated with the increase in professional education at the master's level. (Dr. Toll spoke of this issue in his keynote speech). A common theme was the question of reconciliation of academic quality and professional requirements.

Each paper should be read in full to receive the full benefit of the thinking of the authors. To indicate the direction of the session, though, the nature and major thrust of each paper may be cited.

1. The impact of the requirements of professional education on master's degrees.
2. Three possible objectives of master's degrees in the humanities.
3. Examination of the patterns of academic progress from the baccalaureate through the master's to the doctorate in the field of sociology, and the role of the master's degree in these patterns.

"The Design of Master's Programs in Baccalaureate Level Professions"

Dr. Joan C. Rogers
Assistant Professor
Occupational Therapy Division
University of North Carolina at Chapel Hill

The thesis proposed for examination was that some baccalaureate-level professions have created a degree structure at the master's level that is incongruent with that of higher education in the U.S., to the end that master's degrees in those fields are being devalued.

The American degree structure provides for distinctions between levels based on academic accomplishment, e.g., master's vs. doctoral degrees, and distinctions within levels based on the nature and type of the study undertaken, e.g., MA or MS vs. MA or MS in (professional field). The professions superimpose a sequence of basic and advanced professional education on this degree structure. Basic professional education is that required for entry-level practice; advanced professional education is that further education which is desirable for higher level practice.

These professional programs usually provide liberal arts and basic professional education at the baccalaureate level and advanced professional education and the graduate requirements at the master's level. However, liberal arts baccalaureate students are now recruited into the master's programs, where they receive only the basic professional education and the graduate requirements. These two patterns do not provide the same level of professional achievement, yet the same degree is awarded. One may ask whether the 'basic' pattern can properly be categorized as graduate education.

Three alternatives were proposed as possible solutions.

1. A new structure for the 'basic' program, in which a Certificate of Advanced Graduate Study would be awarded instead of a master's degree.
2. Establishment of scholarly goals which could be reached through either route, though at different levels of sophistication.
3. A requirement that both basic and advanced professional requirements be met before award of the master's degree, regardless of where the student started.

The author suggested that the last appears to be most in concert with the goals of an educational institution to educate scholarly practitioners capable of responding to increasingly complex societal problems.

Further insight into the needs of master's programs in baccalaureate professions can be gained by studying their relation to certain quality indicators: 1)students, 2) curriculum, and 3) faculty. Quality control of these programs can come at the stage of 1) program planning or 2) program review;

the first is more effective.

Resolution of the problem of dual master's degree standards depends on devising a curricular structure which accommodates diverse educational backgrounds. The organizing principle for such restructuring lies in identifying the competencies desired of the practitioner operating at the advanced professional level. Once these are defined, learning experiences can be formulated to accomplish them.

"Master's Degrees in the Humanities"
Dr. Calhoun Winston
Director, Graduate Studies in English
University of Maryland

Recent experimentation among master's programs in the humanities has led to the emergence of certain general objectives. These include 1) providing general education, 2) providing a winnowing mechanism for selecting doctoral candidates, and 3) providing quasi-vocational education.

The motivations underlying these objectives are worth noting.

1) Many baccalaureate graduates feel their undergraduate education was inadequate or incomplete: they return to extend or deepen their learning.
2) This objective stems from the faculty desire to select the best prospects for the development of new scholars in the field.
3) The desire of students to combine the objectives of general education and employment capability has led to some of the most innovative programs in graduate education today. There are many obstacles in their paths but they hold much promise.

Graduate departments in the humanities should continue to pursue all these objectives. Those of general education and quasi-vocational education should be treated with more sympathy and more respect.

"The Master's Degree in the Sociological Enterprise"
Dr. Julie A. Monnold (presenter)
Dr. Allan Schwartzbaum
Department of Sociology
Virginia Commonwealth University

This paper reports on the routes followed and the fates met by a sample of members of the American Sociological Association (1975/76) through the eight possible paths from bachelor's through master's to the doctoral degree (BA or BS to MA or MS to PhD or no PhD).

Some of the principal findings are listed:

1) The most effective route is BS/MS/PhD (4.3% dropout). the least effective is BA/MS/PhD (31.6% dropout).
2) The most typical mobility pattern is to change schools after the bachelor's degree, and to remain at the next school for both the master's and the doctoral degree. (Thirteen percent bypass the master's degree).
3) ASA members who stop at the master's level differ from PhD holders in that they are more likely to be:
    a) female
    b) younger
    c) employed outside academia
    d) in the lower academic ranks
    e) in a research position
4) Differences are seen between those who received their master's degrees in universities where this is the highest degree and those where it is a phase of a doctoral program. The reason for terminating at the master's level are different; in the first case termination may represent the student's educational objective; in the second it is more likely to be involuntary.

The authors recommend:

1) further multivariate studies of the attributes of master's students and their outcomes,

2) more congruence of educational programs to the job market,

3) study of the 'testing-ground' role of terminal master's programs.

During the discussion, the following points were made:

1) Some scholarly master's programs expect very little from previous baccalaureate preparation. Thus, they may be more similar in some ways to the baccalaureate level professional programs which move to professional master's than might be apparent.

2) It was noted that many professional master's programs are in great demand, and their graduates have multiple opportunities. There may be an assessment function here which would be of interest to those responsible for master's programs in the humanities.

3) There is a great need for reliable criteria and methodologies for evaluating master's programs of all kinds.

CURRICULUM DESIGN AND THE DELIVERY OF MASTER'S PROGRAMS

David S. Sparks
Interim Vice President for Graduate Studies and Research

Study for the master's degree at the University of Maryland is a changing and growing process, as well as a large and complex one. Shifting student needs have occasioned re-examination of present programs and the development of new ones. Additionally, we have been making special efforts to broaden access to graduate study by making existing programs available on additional campuses of the University.

Let me begin with a few numbers designed to provide a quick overview of graduate study at the University of Maryland.

1. Opportunities for graduate study at the master's level are offered on five campuses of the University; UMCP, UMAB, UMBC, UMUC, and UMES. It is also offered at locations throughout the State and in the Far East through the auspices of UMUC. Additionally, University faculty participate in a master's program in Fish and Wildlife Management offered by Frostburg State College.
2. We currently offer a master's degree in 84 different programs.
3. In the fall of 1977 more than 5,700 of the 9,362 graduate students enrolled at the University were enrolled in master's level programs.
4. During 1977-78 we awarded 1,674 master's degrees.
5. These degrees were awarded by a graduate faculty that numbered 1,811. The total faculty of the University numbered 2,882 full-time persons in the fall of 1977. Part-time appointments and teaching assistants increase that number to 6,145 full-time and part-time faculty members.

Turning to trends in the numbers, we find that the rate of increase in enrollments dropped from a 10.6% increase in the fall of 1975 to a 1.78% increase in the

fall of 1977. Final data from the fall of 1978 are still being compiled, but we anticipate that they will be down slightly.

We are, of course, sharing the common experience of declining enrollments in teacher education, librarianship, and some of the humanities disciplines. We are also sharing the national trend of increases in business, engineering, some of the sciences, and agriculture. At Maryland I believe we have entered a period of healthy consolidation that will provide us with both the opportunity and the incentive for a thorough review of graduate study at the master's level.

In point of fact, the needed review is well under way and has become a routine part of our process for the review and approval of new or modified graduate programs. Permit me to describe the process and the philosophy on which it is built.

We begin with the conviction that responsibility for the content of academic programs begins with the faculty, and that the role of faculty and administrative review committees is to raise questions about the thrust of a proposed program, its relations with others in similar or neighboring fields, campuses or institutions, and the resource commitments involved in its implementation. In recent years we have focussed increasing attention on the potential market for graduates of the program and for its impact upon our avowed goals to increase opportunities for minorities and women to attain graduate degrees.

Our philosophy of curriculum design also includes a heavy commitment to decentralizing responsibility for both the development and the review of new and modified programs. The basic curriculum is developed by the department, or group of cooperating departments, that will offer the program and monitor student progress

through it. Each subsequent level of review (and there are far too many of them at present) consists of a faculty committee and the cognizant administrator until it is submitted by the President to the University's Board of Regents and to the State Board for Higher Education where lay boards grant final authority to grant the proposed degree.

While I cannot speak for the judgments made by all those who have a role in the development of new or modified programs at the University of Maryland, I believe I find in the results of their deliberations evidence of the following:

1. First, I sense a growing sensitivity to the needs of society. That sensitivity is apparent, in my judgment, in the content of the programs, in the currency of the materials they present, in the educational methods and strategies they employ, and in the validity of the education that is taking place.
2. Secondly, I also find increased sensitivity to the cost society is asked to meet in funding proposed graduate programs through tax dollars. That sensitivity is particularly apparent in a determination to avoid unnecessary duplication of graduate programs. Our review process is very hard on programs that appear to duplicate those offered elsewhere within the University System or outside of it at places convenient to potential students.
3. Thirdly, I find a growing sensitivity to student needs. That sensitivity is frequently expressed in proposals to take the program to the student, where it is possible to do so, without damaging its academic validity or

quality. It is also expressed in a growing concern for the cost, in both time and dollars, of a program to the individual student.

4. Finally, I find evidence of a growing sensitivity to the problem of adequate academic resources, in place or in immediate prospect, needed to establish a proposed program. In our discussions I hear more and more concern for the adequacy of the faculty, in both numbers and quality, for the physical facilities, or the academic supportive services such as libraries, advising, and computing capabilities.

Note that I have been careful to label our growing attention to these elements of good graduate programs as sensitivity. I would not, even if I could in so sophisticated and experienced a company, try to tell you that each of the new or modified programs we have reviewed during the past several years has achieved completely our goal for meeting the needs of society or students. I do believe, however, that the increase in our concern is reflected in very much stronger programs than many of those approved ten to fifteen years ago.

Using these procedures the University of Maryland developed, reviewed, and approved the following graduate programs at the master's level during the past five years for implementation at one or more of our campuses:

1. MA in Urban Studies - UMCP
2. MS in Family and Community Development - UMCP
3. MS in Experimental Biology-Health Sciences - UMBC and UMAB
4. MS in Biological and Medicinal Chemistry - UMBC and UMAB
5. MA in Community-Clinical Psychology - UMBC and UMAB

6. MPS in Policy Sciences - UMBC
7. MS in Animal Sciences - UMCP (A consolidation of three pre-existing programs.
8. MA in Medical Sociology and the Sociology of the Aging - UMCP and UMAB
9. MA in Instructional Systems Development - UMBC
10. MS in Business and Management - UMCP
11. MA in Historical Studies - UMBC
12. MBA-JD Program - UMCP and UMAB
13. Master of General Administration - UMUC
14. MS in Marine-Estuarine-Environmental Sciences - All University
15. M.Ed. in Guidance and Counseling - UMES

One of the more striking developments of our process of curriculum design and implementation during the past three years is a rapid increase in the number of degree programs undergoing revision and, in many instances, being opened to students on one or more additional campuses of the University.

To bring the record up to date, we now have under active consideration the following master's level programs:

1. MS in Oral Biology - UMAB
2. MM and MA in Music - UMBC
3. MS in Chemistry - UMBC and UMCP
4. MS in Chemical Physics - UMBC
5. MA in Geography - UMBC
6. MA in African-American Studies - UMBC

7. MA in English Studies - UMBC

8. MA in Humanities - UMBC

9. Master of Architecture - UMCP

10. Master of Public Management - All University

11. M.Ed. in Special Education - UMES and UMCP

A list of this length, involving as many campuses as it does, and implying a continuing growth of graduate study at the master's level, requires comment.

No, we are not out of our minds. We are, as claimed previously, more sensitive to the needs of society and our students. The explanation for our continuing effort to develop additional master's programs lies in a combination of circumstances and opportunities.

1. The Washington-Baltimore region continues to experience rising expectations for educational opportunities.

2. Educational programs developed ten, fifteen, and in some instances more than twenty years ago, are simply no longer pertinent to the needs of today's students.

3. The University is seeking to open additional opportunities for currently enrolled students by making graduate study more widely available on each campus of the University.

4. The Maryland State Board for Higher Education, in a master plan for higher education throughout the State, adopted in 1978, mandates a shift in emphasis of the College Park Campus toward upper division undergraduate and graduate study. It also mandates increasing graduate study opportunities for part-time students, particularly in the late afternoon and evening and especially in the Baltimore region.

Looked at collectively our new and developing graduate programs at the master's level display a university aggressively wrestling with the problems of access, quality, and utility. We think we know what the problems are and we are confident we have some of the answers. We are equally certain that there are many more we may not have anticipated or that we have, to date, not addressed, much less resolved. Among the more pressing ones that come to mind are:

1. Simplyfying our procedures for the review of new or modified graduate program proposals without denying the appropriate faculty and administrators an opportunity to contribute to the discussion.

2. Persuading the public, through their representatives in the legislature and executive offices, of the fact that funds invested in education, particularly graduate education, is indeed an investment rather than an expenditure. Moreover, it is an investment that provides a very high return for a relatively modest investment.

3. Persuading all involved in graduate study that it is very easy to simulate the trappings of graduate study and very difficult to achieve genuine quality. And that genuine quality is very easy for the student to recognize -- particularly when he or she looks back five years after completing the degree.

DSS/jb
March 1, 1979

RECORDER'S COMMENTS

Richard P. Hallion
(University of Maryland, UC)

We have been privileged to hear three thought-provoking papers concerning curriculum design and delivery of Master's programs, including a thorough-going and excellent overview of Master's programs at the University of Maryland. Dr. David S. Sparks, Acting Vice President for Graduate Studies and Research at the University of Maryland, has instructed us as to what can be done in a traditional environment to assure the viability of Master's programs and requisite academic quality. Dr. Theodore Clevenger, Jr., Dean of the College of Communications at Florida State University, has presented an interesting scheme worthy of our closer examination; one might, indeed, term it a "modest proposal." Dr. Charles Ford, Associate Dean for Curriculum Affairs, State University of New York at Buffalo, and Dr. Harley Flack, Dean of the College of Allied Health Sciences, Howard University, have furnished us with an analytical case study pointing out the dimensions of the quandary facing those desiring to increase the number of minority health professionals. Finally, Dr. James L. Welch, Chairman of the Department of Medical Technology at California State University, Dominguez Hills, has provided us with a good scheme for evaluating the worth of an external degree program to ensure continued success of that program.

Dr. Sparks' invited paper was essentially an exercise in prognostic history. His thesis is a simple one: The Master's program is alive and well at the University of Maryland because of care in managing the program, and intensive efforts by administrators to determine patterns of delivery. The five campuses of the University--UMCP, UMB, UMBC, UMUC, and UMES--present a total of 94 separate programs; recently 5,700 of the 9,300 graduate students on campus were involved in some form of a Master's program. A hallmark of the Maryland experience has been the careful attention to program review, including the conviction that program content responsibility begins and ends with the faculty, attention on the market for graduates of the program, and a heavy committment to decentralize development and review responsibilities for the programs. As an example, there are now 22 levels of program review at Maryland and within the state! The difficulty in overcoming this topheavy review procedure comes when one has to convince a reviewer that his particular inputs are irrelevant or insignificant--a common problem involving traditional trends in the justification of bureaucracy. More significantly, however, are the growing sensitivities that program developers and reviewers are acquiring--sensitivity to the needs of society, sensitivity to the cost that society has to meet in tax dollars supporting Master's programs, sensitivity to student needs, and sensitivity to the required facilities, services, and faculty needed to undertake such programs.

Dean Clevenger's paper was eloquently argued. Analyzing a curricular option approach developed at Florida State University, Dean Clevenger postulated a system based on answering the question "What does the student need from a Master's program?" Essentially, this approach involves setting goals that the program can provide, identifying clusters or goals that would be beneficial to students, specifying the particular knowledge and skills that a student needs, and selecting courses to develop those skills and reach the program goals. It is not a program of career education. It requires extensive planning involving a course by option matrix. Analysis of the data seems to support the value of the approach, but it must be stressed that this data is very tentative, and based on just the experiences of one school. It would be far more satisfactory if we had a greater data base supporting this approach. More disturbing, however, are the "track" aspects to the program. For, although the claim is advanced that the program enhances flexibility, once a student has accumulated 5 hrs. in the program, he/she is essentially locked into the particular option selected for the remaining 40. In short, once the student makes the choice, the student must live with it. Now, there are many traditional program structures (I'm thinking particularly of programs in the field of history) that are more flexible. Indeed, the curricular option approach seems little suited to the social sciences and humanities, areas that seem inherently to be more flexible. Also disturbing is the implication in this program structure that the student does not have the familiarity with the field or the ability to structure a suitable program on their own, in conjunction with their academic advisor

(a traditional approach). Further, we need to closely examine how this system works with regard to part-time as well as full-time students. At this stage, this intriguing approach can neither be given wholehearted support nor rejection. Dean Clevenger has recognised this, and is commending it to us for our general and future consideration and debate.

Drs. Ford and Flack addressed a most critical question: how can society improve health care for the black and disadvantaged through education of health care professionals? Unfortunately, there is a built-in "Catch 22" cycle that must be overcome: entry and graduation requirements for students are high; the course structure is oriented towards academic excellence; and last, minorities have few encounters with suitable minority role models. How, then, can this vicious chain be broken? The tentative answer offered is that the cycle must be broken in the preparation of faculty, and, to accomplish this, we must go beyond the traditional minority institution in our search for minority health care professionals. Such a program, to be successful, should be multidisciplinary; economic in resource use; require the student to select an area of professional concentration; require having a concentration in a related allied health area; require faculty to be qualified and experienced health professionals having both education and professional credentials; and, finally, be committed to excellence. We must recognize that this program may not be a cure-all, but it is, at least, a start. Such a program would require 9 credits in core subjects, 9-12 credits of professional concentration; 9-12 credits in an allied health concentration; 3-6 credits in practice; and 3-6 credits in a Master's project.

Finally, Dr. Welch addresses the issue of assessing graduate programs, using the Master of Science in Medical Technology (MSMT) as a case in point. Such a program has a specialized criteria going beyond the normal requirements of graduate school, including professional experience and license requirements. As a result, the program's students form an intriguing group. Two-thirds of them are over 35 years of age; three-fourths of them have been in medical technology practice for over five years; three-fourths of them are supervisory personnel at health care facilities. Ensuring that the MSMT program remains viable, meeting both student goals and society's needs, requires a variety of analytical tools, including realistic assessment of the program by administrators, and post-graduate review of students who have completed the MSMT program. The adequacy of the program is assured if the following conditions are met: acquire program applicants by good communication within the medical technology field; use professional standards to evaluate applicants, including license requirements; applicants must have good grade point averages; all faculty must meet regular campus requirements to ensure academic quality of instruction; suitable library resources must be available; the program should submit an annual report on the program to higher authority; the program should undergo internal annual review; the skills and knowledge of graduating students should be evaluated; two years after graduation, administrators should evaluate how the program has given those students upward mobility. This scheme of evaluation by "process objectives" seems applicable to many other programs in many other fields beside that of the MSMT, and would appear to be well worth emulation.

The implications of all these studies are troubling. We have not yet derived, it seems, models or forecasting techniques that can be applied across the board to assess Master's programs in general. Two of these papers dealt in some form with the medical field. It would be interesting to see some attempts to forecast or define the field rules that govern the Master's program in the social sciences and humanities. We need studies incorporating more feedback to educators from employees, instructors, current students, and foreign students.

Two of the papers, those of Drs. Welch, Flack, and Ford, emphasized that their particular programs require high entry standards for candidate students. This is, of course, vital. But, in the case of Drs. Flack and Ford, it reemphasizes the great difficulty that will continue to plague those who wish to break the "Catch 22" cycle they so carefully enunciated. So we must look forward. We are in the era of detailed analysis of case studies. Let us continue with these. But let us also be willing to be bold in our thinking--be creative--and dare to experiment.

Recorder's Comments on the Report of the Council of Graduate Schools Task Force on the Assessment of Quality in Master's Degree Programs

Issues in the Development and Use of Appropriate Measuring Devices

Russell Ames
University of Maryland University College

My purpose in this brief report is to summarize and comment upon the Report of the Council of Graduate Schools (CGS) Task Force on the Assessment of Quality in Master's Degree Programs. When confronted with the problem of program assessment, the evaluator must answer two questions: 1) What dimensions of the program are important for assessment? and 2) What methods and procedures should be used to conduct the assessment? The answer to the first question involves an analysis of the important characteristics or criteria of a program, and the second one involves the development and accurate use of methodologies of assessment. The Task Force reported on the development of an instrument (CGS instrument) designed to assess the quality of Master's Degree Programs. My comments focus on how the Task Force attempted to deal with the above two questions in the development of the formal CGS instrument.

The Task Force constructed a survey instrument to gather data on the question: What characteristics and indicators should be included in a questionnaire designed to evaluate Master's programs? Approximately 200 College and University Deans were surveyed from a broad, nationwide sample. The Deans were asked to rate the importance of a variety of factors (e.g., faculty, students, learning resources, etc.) for their importance to quality. The survey respondents were also asked to rate the relative availability of reliable indicators of these criteria. The results from the survey indicated that the following characteristics were most important:

A. Quality of faculty including instructional, scholarly, and artistic contributions, commitment to program, and training and experience.

B. Quality of students including academic ability, commitment and motivation.

C. Resources including faculty resources, facilities and services, and administrative support.

D. Learning environment including the competitiveness, rigorousness, and demanding nature of the intellectual environment. Faculty satisfaction was the second most important characteristic under this category.

E. Program contents and procedures including academic offerings and degree requirements.

F. Characteristics of recent alumni including satisfaction with educational training.

With respect to the questions about the availability of measurement devices for these criteria, the Deans rated those items which are most easily quantified the highest, e.g., scholarly contributions, and training and experience of faculty. The Task Force used the data from the questionnaire to develop a formal and quantitative instrument for the assessment of quality in Master's programs.

The Instrument

The Task Force has now completed, in cooperation with the Educational Testing Service, about three-fourths of the process involved in preparing a final instrument for the assessment of quality of Master's Degree programs. The instrument is designed so that departments can rate themselves on quantitative scales according to the degree to which aspects of their faculty, students, learning resources, etc. meet a particular level of quality. National profiles and norms will be developed for the CGS instrument for different types of institutions, departments, and program areas. An attempt will be made to give a breakdown of the norms for as many categories (e.g., location, size, etc.) as is logical and practically feasible. The final product will include four similar instruments based on the six criteria. A separate version of the instrument will be developed for faculty, administrators, students and alumni. Graduate departments and programs will be encouraged to use the instruments in an overall self-assessment of quality. After completing the

self-assessment process, individual departments can use the national norms as a basis for comparison.

Problems

During the audience discussion of the Task Force Report a number of problems were noted:

1. National norms may become prescriptions for the goals of all Master's programs, rather than data for self-assessment.
2. It may be inappropriate to assess the quality of Master's programs using essentially the same criteria developed to assess the quality of Doctoral programs.
3. The current procedure does not directly address the criterion problem. All of the factors assessed are process criteria rather than outcome criteria. That is, the CGS instrument attempts to assess the quality of those factors which are believed to lead to the development of quality students at the end of a program. There is no direct assessment of whether students in fact have achieved the objectives of a program at a given level of quality.

Strengths and Cautions in the Use of the Instrument

Noting the criticisms above, the instrument appears to have a number of strengths in that: 1) It is carefully developed and empirically derived; 2) Norms will be available to provide departments or single programs with a comparison point; 3) The procedures appear to be cost effective and are easy to use; 4) The assessment procedure will emphasize self-assessment.

While there are a number of limitations to the use of the CGS instrument, these dangers can be reduced if the instrument is used with caution. Before using the CGS instrument, the department or institution should clarify its goals for its Master's programs. It can then be determined which criteria from the CGS instrument are most important. In some cases, the goals might relate to the quality of faculty scholarship, but in others the goals might be more related to available resources.

A clear statement of goals would allow for more flexible use of the instrument and thus meet concerns set forth by Dr. Kenneth Clark who stressed in his address at the Conference that experimentation with programs at the Master's level was very important. In fact, he noted that the Master's degree was perhaps the only place left in academia where real innovation and change could take place. Given this mandate for innovation and change, it is very necessary that the criteria in the CGS instrument not be taken as normative and prescriptive.

A second problem was noted with respect to the methodology of the CGS instrument. The current CGS instrument format represents a single and limited methodology, i.e., self-assessment ratings are to be compared to normative data on program processes rather than program output variables. Efforts should be directed to develop other methodologies, particularly ones which focus on what qualities students possess after completing a Master's program.

I have attempted to translate these concerns into a set of action guidelines which the Task Force could use in the implementation phase of the assessment process it has developed. These action guidelines are:

1. Develop a statement of goals for the use of the instrument which emphasizes not only quality standards, but also innovation and flexibility of programming at the Master's level.
2. Develop a list of procedures for using the national norms for the instrument which emphasizes the informational value of the data rather than the social comparison or status value of a high ranking.
3. Develop procedures for monitoring the use of the instrument paying particular attention to how small and less traditional programs make constructive use of the data.
4. Avoid the sponsorship of the publication of national comparisons of graduate programs based on data gathered from the instrument. Instead, encourage publication of descriptions of how programs make use of the

instrument to improve and verify the improvement of quality in local cases.

In summary, the CGS instrument is only a beginning, but because it has been carefully developed and it has the backing of the Council of Graduate Schools and the Educational Testing Service it could be easily adopted as a major tool of accreditation and comparison between schools for program excellence. Such use could severely limit innovative programs, high quality programs developed by small schools, or specialized and non-traditional Master's degree programs. If it is in fact the purpose of the Council of Graduate Schools to set standards and encourage the development of quality graduate education, then CGS has a much greater responsibility than simply developing an instrument. It should set guidelines for and monitor the responsible use of the CGS instrument.

THE ISSUE OF QUALITY IN MASTER'S DEGREE PROGRAMS

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No one in higher education is opposed to quality. So why do we emphasize in this conference quality with regard to Master's programs? Are issues of quality somehow different for one level of education than for another? Perhaps this emphasis is needed because the Master's degree has not been a degree that represents the highest quality of performance in an institution, either of faculty, of students, or of program development. The Master's degree often is given away: as a consolation prize to our poorest doctoral students, and as a reward in passage to our best. As a professional or technical degree it is considered of lesser consequence than the Ph.D. It may well be that "quality" is featured on this program because we do not expect everyone to mount a program of quality, and we will care if the graduates of that other program of inferior quality compete successfully with the graduates of our program.

Much of the time, however, we are not talking about quality but about something else. Sometimes we talk about popularity, expressing concern that some programs will attract students and yet not maintain the high standards that ought to be held for such students. Sometimes we define quality as respectability, meaning that such programs ought to be offered only in institutions of high quality, preferably with Ph.D. programs, and that the faculty in those Ph.D. programs should look favorably upon, and perhaps even participate in the Master's programs we are talking about. Often we define quality as status and prestige, meaning that our program of quality is one that gets foundation support or is a program in an institution with a Ph.D., or is it a program that is in a prestigious institution? It may be that we tend to define quality as useful, that is, its graduates get jobs, or as successful, meaning that its tuition income more than covers the out-of-pocket expenses,

it makes money. We may define a quality program as one that is appropriate, that it applies unused resources in a fiscally sound manner to the benefit of at least some students. Perhaps we could define quality primarily in terms of honesty, that the program does for its students what the brochures say the program will do for the students.

This array of adjectives is intended to draw attention to the variety of motivations that lead us all today to be looking more toward Master's programs than we have in the past. We can see the declining job market for our Ph.D.'s. We can see the under-utilization of our faculties. We can see the need to generate more tuition revenue to sustain our costly programs. And so we look with interest and fascination at the possibility of developing programs that would use our faculty in a new way, with students with different objectives, with students whose lifetime earnings might be increased or who at least think so enough to pay tuition as they earn their Master's degree with us. Perhaps the word that we want then is successful. We would like to develop some successful Master's programs. Successful for the students and successful for us in using our under-utilized resources.

I hope you noticed that I did not say that these persons with Master's degrees would be contributors to research and scholarship. Nor did I say that they would thereby lead lives of greater usefulness. Nor did I say that their lives would be happier and full of greater contentment. Today's discussion of Master's degrees is not generated in terms of our own established priorities, but rather is an accommodation to the painful realities of the moment as we face declining numbers of students willing to spend large amounts of money in order to profit from our educational services.

We have traditional methods for the evaluation of the quality of institutions. They may not be fully appropriate to the evaluation of the Master's programs we are talking about today. Let me remind you, however,

of the ways in which institutions do get appraised. The undergraduate programs that have been considered to be of highest quality are those that have the highest proportion of their students who go on to graduate school to earn Ph.D.'s or professional schools to earn advanced degrees (e.g., Swarthmore, Haverford, Wesleyan, Amherst, Oberlin, Reed, Pomona). These same institutions tend to be the ones that have students of the highest measured ability using ACT or SAT test scores. They also tend to be those institutions that have the faculty of the highest quality. Faculty quality is usually assessed in terms of the proportion holding the Ph.D., or in measures of publications of faculty. Quality is inferred by size of endowment, by the amount of money spent on instruction, on buildings, or library holdings. Evaluations made of graduate programs are made by department rather than by college or university. Here the primary index is the opinion of scholars and scientists about the quality of faculty, with citation indices, number of articles published, the number of Nobel Prizes won, and the like being also used. In general, there is consensus about the very best departments, and gradually more and more disagreement as one moves farther down the ranks. In general, large programs are overestimated in relationship to smaller programs. These departmental ratings almost always include among the first ten Harvard, Stanford, Michigan, Berkeley, and Chicago.

All of these usual measures of quality of undergraduate programs and of graduate programs, and of professional school programs are indirect, faulty in a critical way, for they either judge a program by the quality of persons who enter it or judge a program by the quality of persons participating in it, measuring that quality in a way which is not directly relevant to the quality of teaching or educational performance of the faculty member. Those studies that evaluate in terms of outcome variables show differences between institutions, but these differences almost totally vanish when there is an

adjustment for the quality of the entering class of students into the program. In other words, most evidences of quality are gross approximations and, for the student trying to make a decision about the place at which to study, primarily irrelevant. Most such studies are based on assumptions not proved, namely that studying with outstanding research professors will enable you to learn more than studying with other persons. Or that if across the hall from you is a student who someday will win a Nobel Prize, your education is somehow or other improved by that fact. While I do not want to downgrade the mythology of higher education, I do want to point out that most of these assumptions are just that -- assumptions.

We are probably better off to establish new standards and new criteria for the Master's programs we are talking about. First we should decide what the purposes of the programs are, and then establish the criteria in terms of those purposes. In almost every instance, a Master's program prepares a person for some kind of professional service. The student expects to get a job by virtue of that education. The student expects to earn more with that training than he or she would have earned otherwise. And, if this does happen in the first job, the student expects that the basis has been laid for the student's being promoted and developing in the area of specialty in which he has been educated. This is a quite different objective than we have for a baccalaureate program or for some of our programs leading to the Ph.D. Faculties in Ph.D. programs want to profess, not teach. They prepare for their careers by study of subject matter, and mastery of it as they add to it. They do not try to teach as much as they try to be a resource for an eager, motivated student. The MA student expects to be taught something that will be useful either immediately or ultimately. The usefulness of the educational program makes this more of a training program than a basic education program.

That will mean that there will be conflicts among faculty about such objectives, for regardless of the way programs are developed, devised and set in motion, there will be faculty members who will oppose their very intent, arguing that the basic educational purposes of that given unit of the university are being subverted and that that particular educational unit is becoming a training institute.

Let us admit to that. Let us also agree that there are things that faculty members know, things that their students can learn and that having learned those things the students can be better citizens. And earn more money. The prime criterion for the quality of our new MA program then becomes the effect that that program has had on the student. The criterion for a quality Master's program must be the impact of that program on the students. But faculty and students must be in agreement on purposes. If a student takes the program because the student expects to get a job, then the criterion for success is whether or not the students do get placed. If the student expects to increase his lifetime earnings then the criterion of success is whether or not he does. And the faculty must be committed to achieving this effect. I argue that these are not crass commercial criteria, but that they relate directly to the objective that we set for such programs. Let us not advertise a program as being useful for a student and then argue that it is of no concern to us whether he or she is employable or whether he or she earns more money by virtue of that. The earning of more money is society's way of reflecting on the usefulness of a person's contribution to the productive efforts in the economy. We should not sell short that criterion for success of our Master's programs.

The trouble I have with this argument is that I am absolutely convinced that some places that I think offer second-rate programs will offer Master's degree programs that by the criteria I have established will look first rate.

Their graduates will get jobs, and prosper. And I will have a momentary annoyance. But it will only be momentary. I am convinced that there are some excellent educational programs in institutions that all of us think are third rate or fourth rate. I believe that there are educational effects on individuals that are beyond belief in institutions in which we do not find any Nobel Prize winners, no outstanding research scholars, and very little of the sort of scholarly surroundings that we expect in the Ph.D., programs of high quality. When such programs come to our attention, we should applaud. But my annoyance returns when I reflect that many times students and faculty will not have common objectives, and these crass commercial objectives of students will not be achieved.

I worry about such programs being properly developed, for the meaning of academic quality has never centered around such matters as impact on students. If it had, our view of Colleges of Agriculture and their extension services would be different, indeed. For no greater revolution has ever occurred due to education than the revolution in farm practices, led by teams of extension agents. Our country is well fed and an exporter of foodstuffs using less than 5 percent of the labor force; yet, today are Iowa State and Harvard considered equal in quality!

Harvard does claim leadership in matters academic, and strives to maintain that leadership by attracting eminent scholars and scientists to its faculty. That much of modern technology owes its origins to work in the laboratories of MIT and CalTech is not disputed, and attests to another mark of quality. They are models. But we can perhaps do better in our choice of models if we ask not about quality in its traditional academic meaning, and ask instead about goals and how to attain them. We must not judge a program by the individual eminence of each person on the faculty roster when the

learning activities planned for the students become the critical source of variance.

Only by placing emphasis on impact upon students can we make any progress in defining academic quality in other than traditional terms, and only by finding a way to publicize this variable will any nontraditional programs become known for their quality.

A Master's program will have tough sledding in getting such a reputation in academic circles. The ivory tower is mighty conservative, and equally snobbish. But there are signs of change: The Master's programs of management schools now are rated for quality. A business school dean looks closely at the test scores of applicants, and compares scores with those schools with which he is competing. Each school measures its success in part by the average beginning salary of its graduates. These are not quite the traditional views of academic quality, and they relate only to Master's degree recipients. We must expect to generate an appropriate climate for the development of meaningful measures of quality for those innovative Master's programs all of us want to see developing and prospering in the next decade. Perhaps we will have to look to the "real" world, not the ivory tower, for the first signs of recognition of quality in these Master's degree programs. And maybe those signs will appear more quickly than we think. When they do, our new Master's degrees will no longer be consolation prizes.

We have an advantage in experimenting with the MA, for it has not been invested with indispensible qualities as have the BA and the Ph.D. So we can innovate with it. We can use the MA to respond to society's special needs and demands, just as we use the Ph.D. for our own need to reproduce ourselves as scholars.

Such innovations cannot be judged on the usual academic criteria. The programs need to produce changes, must measure such changes, and must be

modified as society's demands change. They will call on us to do something different -- to employ faculty as teachers, not just as professors. And to specify what is to be taught.

Where is the best teaching being done? In colleges and universities? I think not. Who among us can match the detail in teaching of engineers and technicians at IBM who are responsible for keeping their machine systems running? Are we the leaders in studying the teaching and learning process? I think not. I believe the U. S. Army wins that award, hands down. Yet we are the highest level of an enormous effort in education, with teaching and learning our prime responsibility.

Accepting the responsibility of developing useful MA programs entails a much greater and broader effort than just advertising a program. I trust we can accept the charge and do some fine things. We then must make certain that we get reviewed, evaluated, accredited, supported, and praised on the proper criteria of quality.

ESTABLISHING QUALITY CRITERIA IN MASTER'S PROGRAMS

BY

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Today, the word "quality" is used to describe all kinds of soap, cereal, automobiles and even master's degree programs. What is quality? Most of us aren't certain. We are constantly bombarded with "quality" in products, in services, in almost every aspect of life. The result is that, for most of us, the word has lost its meaning; rather like the British in WWII, who categorized so many things as "top secret" that they had to create a new category called "most secret."

In higher education, we haven't done much to improve the situation. How many persons associated with graduate programs do you know who aren't doing a "quality" job? If the American public seems confused about what we mean when we talk and write about "quality education", we in higher education have done much to bring about this confusion.

And so what of quality criteria in master's programs? I'll use the word in spite of my preamble, but be assured that I speak from the assumption that whatever you are doing in your graduate program is a quality effort. If, as I proceed, you begin to feel that much of my definition smacks of the "good old days", you'll be close to correct.

Clearly, I think, the need for definitive criteria in master's programs is apparent today. The Council of Graduate Schools reports that last year 300,000 master's degrees were granted in over 250 fields. Not unlike other areas of higher education, graduate study was caught up in the wave of modernization and democracy that swept across America in the '60s and early '70s. But the promise of access, equal opportunity, and relevance also brought academic compromise as well as enrichment. Some observers believe that academic standards may slip even more as enrollments drop.

during a period of enrollment decline, many of us are understandably reluctant to "clean up our act." For understandable reasons, our prime concern often appears to be more related to generating income and supporting faculty salaries than to "establishing quality criteria."

There are indications that some institutions are seriously reviewing their programs in an effort to establish or insure more definitive and discriminating standards. Some optimists believe that the master's programs that will survive the '80s will be those anchored in the academic disciplines. Increasingly, we are hearing from leaders in business and government or education: "Give me a solid M.B.A., and I'll make a good public administrator out of him (or her)," or, "What I wouldn't give to see a good old M.A. in History," or "Tomorrow's leaders must be grounded in the liberal arts."

And in the face of the fact that some bachelor degree holders are scarcely acquainted with basic academic skills, it is understandable that there are questions about our master's programs. Some even style master's programs as a place for people who can't land a job or get into professional schools or Ph.D. programs.

What we need to do, I think, is make sure that we have a rationale for our master's programs that includes a substantive academic base and a reasonable market condition. The Council of Graduate Schools is moving in this direction. In 1977, the Council outlined workable criteria for measuring and insuring quality in master's programs. A conclusion of that annual meeting was that -

> Broadly speaking, the master's degree indicates that the holder has mastered a program in a particular field sufficiently to pursue creative projects in that specialty.
>
> ...and that the degree should be awarded for completion of a coherent program designed to assure the mastery of specified knowledge and skills, rather than for the random accumulation of a certain number of course credits after attaining the baccalaureate.

Finally, the Council agreed at that meeting that -

> Graduate Schools of high quality demand the investment of additional resources beyond those normally required for the undergraduate curriculum... and a college or university should initiate a master's degree program only when demonstrable need exists and when the institution's resource and/or special traditions insure it can provide a program of merit.

Most of you are aware that the Council and the Educational Testing Service have developed an assessment tool which can play an important role in answering questions about quality in graduate programs. While it has been used largely, if not exclusively, at the doctoral level, the instrument, or a similar one, shows promise at the master's level. I applaud this movement toward measurable standardization, for I believe that it is likely that sooner or later -- and probably sooner -- all of us will have to be able to answer definitive quality questions regarding our master's programs. This kind of instrument can help provide many of these answers.

What are the conditions that characterize quality master's program? To some extent, each condition is debatable and surely there are other measures of merit than those I shall mention here; but for starters:

1. <u>What is the quality of the faculty</u>? How many have terminal degrees in their fields? How many have significant experience in the field? What is the percentage of "regular" faculty as compared to part-time faculty? Do they have reasonable output of scholarly research, articles/books, and professional and creative involvement in their fields? Are they evaluated by their students?
2. <u>What kinds of students are there in the master's program</u>? What are the undergraduate GPA's of the student? From where? More importantly perhaps, what were GRE's examination scores or other test results? If entrance examinations were not required, what standardized or objective criteria were applied before admission? How many of the students were admitted provisionally? How many are full time? What were their backgrounds? How many graduate? What are the characteristics of students who don't graduate?

3. How strong are the graduates of the program? What types of positions do graduates obtain? Do you know how employers evaluate your graduates? How many graduates continue on for doctoral work? Has there been any assessment of graduate attitudes concerning the program and its value in professional and personal development? What are the measurable characteristics of graduates?

4. How committed is the institution to the graduate program? Has there been adequate budgetary support of the program? Does the program have sufficient access to the administrative structure in order to make a case for financial support and other resources? Is the dean important? Are the faculty distinctive? Teaching load? Salary? How much work is taken off-campus?

5. How vigorous is the master's program itself? Is there a solid core area of knowledge that one must master? Are there admission standards which are applied with reasonable consistency? Is the mastery of required skills determined, to some extent, by objective standards? Are research skills required, developed, and tested? Is there a major independent exercise required? A thesis? Is there a comprehensive final examination procedure both oral and written, which involves faculty from at least one other discipline? If these conditions are not present, should they be?

There are also ways that master's programs can be compared with one another. Although care must be exercised, general qualitative assessments can be made by comparing one program with others.

Comparisons have usually been made by "program kind." That is, we usually compare educational administration programs with other educational administration programs. Others suggest that it would also be useful to compare different types of master's degree programs from a qualitative standpoint. We all have done this informally at our institutions. We often say that a biology program, for example, is stronger than an English program or vice versa. And, to me, these kinds of comparisons do much more good than harm.

Assuming some variation in goals and resources, helpful comparisons can be made in everything from student standardized test scores and faculty qualifications to academic requirements.

Having been associated with rapidly growing, expanding state universities for over 20 years, I have come to believe firmly that graduate courses and programs should be designed so that they can be phased out if necessary. Although, for most of us, this advice is "a day late and a dollar short," I, nonetheless, believe that it should be said here. As we respond to present needs with new programs, we also realize that there may come a time when the programs are no longer needed. One of the serious questions relating to quality in master's degree programs are the courses, and sometimes entire programs, that are allowed to continue when "their time has passed." To address this squarely involves tough questions of faculty retooling and reassignment complicated by tenure.

Another condition that has been unsettling to me is the graduate programs that have been developed due to pressure from special interest groups. In retrospect, I see that we've done this as an easy way out or as a politically expedient way to get things done in building financial support and enrollments for new programs. However, at a later date, when the program has served its purpose, it appears impossible to phase it out. The resources, human and otherwise, allocated to the program, are used to inspire threatening or, at least, uncomfortable pressure from both inside and outside the institution.

Some are concerned about the continuing practice of maintaining or developing self-contained professional schools within our universities. I believe that there is great merit in master's programs which are rigorous and operate in a well-defined discipline. However, I have reservations about having virtually all of the course work conducted by the faculty of a single department or school. To practice such programs exclusively is to invite both criticism and program stultification. Assuming that study

in a related field is required, ordinarily those subjects should be taught by persons who are trained in those fields and who hold academic positions in other departments or divisions of the university.

And finally, I believe that the increasingly popular concept of marketing is important in discussion of quality criteria in master's programs. Traditionally, when we developed and evaluated master's programs, we have involved deans and faculty, chiefly from within our institutions but sometimes from outside. The stronger the program, the more outside authorities we usually involve in evaluation. The weaker and more provincial the program, the fewer outsiders. I believe that, in all programs, we have used too narrow a range of evaluators. We should involve not only academic people but also our degree holders and those who consider them for admission to doctoral programs or professional schools. Where the master's is a terminal degree, we should also involve prospective employers. We're only creating future problems for ourselves and our students when we turn out master's degree holders in fields already overcrowded or with education that doesn't fit his or her future occupation or graduate/professional school's requirements.

It has been suggested that "market" surveys along these lines would be particularly helpful. Such surveys might identify those areas where the master's should be the terminal degree. For instance, to what extent would a good master's program obviate the need for certain Doctor of Arts programs, which some believe were created by a combination of frustrated faculty, apparently unlimited resources, and unsophisticated students.

Let me sum up. I believe that, ideally--and there is nothing wrong with a graduate dean being an idealist--a master's program should include: stringent admissions requirements including standardized testing; a firm tie to a logical academic core; a faculty with diverse and impeccable credentials; some study outside the field of specialty, preferably a foreign language;

an academic year in residence; at least two independent papers or projects; a written comprehensive examination; and an original thesis that must be defended before a panel of faculty both in and out of the field of specialty.

While I fully recognize that conditions do not always allow for such a program, we all should acknowledge that anyone who completes it is indeed a master.

BIBLIOGRAPHY

"The Master's Degree", Council of Graduate Schools in the United States, Washington, D.C., 1977.

Dorney, Bernard J., "Uses and Limitations of Dimensions of Quality Study", Proceeding of the Seventeenth Annual Meeting, Council of Graduate Schools of the United States, New Orleans, La., 1977, p.26.

Hargrave, Carolyn H., "Probing the Master's Degree", Ibid, pp. 145-146.

Bowhill, John C., The Perils of Specialization, Council for Financial Aid to Education, Inc., New York, NY, November 1970.

TRADITIONAL VS. NONTRADITIONAL MASTER'S PROGRAMS AND THEIR RELATIONSHIP TO QUALITY STANDARDS

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The traditional American master's degree can trace its origins to the Middle Ages where the titles master, doctor, and professor were synonymous. At Bologna for example, a center for the study of civil and common law, a professor was referred to as a doctor. Such a usage spread throughout Italy and Germany and Paris. A bit later at Oxford the faculty were called masters. Until modern times beginning with the mid 1850s the German Doctor of Philosophy and the English Master of Arts basically were equivalent degrees.[1] In this earliest use of the term, master (and doctor) implied title to an office such as a faculty position with the university. As the use of the terms spread and a significant number of non-teaching individuals with the titles increased, the terms or titles became less meaningful and became more of an accolade than a license to teach.[2]

The growth and development of the master's degree has been somewhat cyclical. In the twelfth century after having become a bachelor or apprentice teacher, and having had an additional five or six years of experience and study, could sit for a public examination, be awarded a license and be admitted to the guild of masters. In In England the master's was gradually downgraded to a mere formality while in the United States it became the first earned advanced and/or professional degree. In Western Europe today

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[1]Stephen H. Spurr, Academic Degree Structures: Innovative Approaches, (New York: McGraw-Hill, 1970), p. 10.

[2]Charles H. Haskins, The Rise of Universities, (Ithaca, New York: Cornell University Press, 1957), pp. 8-10.

the master's is again becoming a formally earned advanced degree similar to the American pattern.[3]

Today in the United States there are two main types of graduate programs which are characterized by different primary objectives. These are the research-oriented master's where the main objective is scholarly or research activity in search of new knowledge and usually results in the award of the Master of Arts or Master of Science degree, and the practice-oriented master's where the main objective is in the transmission of existing knowledge for professional practice.[4]

In addition to the M.A. and M.S. degrees it is estimated that currently there are over 400 professional or practitioner master's degree titles in use by institutions throughout the United States.[5]

In the report on graduate education produced by the Council on Post-secondary Accreditation (COPA) study of nontraditional education, Paul Dressel of Michigan State University has identified the essential characteristics of graduate study as the following:

1. content reflecting and building upon the knowledge and intellectual maturity a capable student acquires during the undergraduate years;
2. study in the company of students interested in analyzing, exploring, questioning, reconsidering, and synthesizing old and new knowledge and skills;
3. demands that students inquire searchingly and apply themselves fully;

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[3]Spurr, pp. 63-64.

[4]Accreditation of Graduate Education, A Joint Policy Statement by the Council of Graduate Schools in the United States and The Council on Post-secondary Accreditation, (Washington, D.C., 1978), p. 2.

[5]Paul Dressel, Problems and Principles in the Recognition or Accreditation of Graduate Education, (Washington, D.C.: The Council on Post-secondary Accreditation, 1978), p. 23.

4. close and frequent contact with experienced scholar-teachers in circumstances that facilitate interaction between the student and the professor as well as among the students themselves;
5. length of such duration that there is time for reflection, absorption, and the emergence of independence and self-confidence;
6. resources and an environment sufficiently stimulating to promote learning and meet educational objectives;
7. evaluation of student performance to an extent that students and professors are confident of the worth of their accomplishments.[6]

The joint policy statement of COPA and the Council of Graduate Schools in the United States (COGS) on the Accreditation of Graduate Education issued in May of 1978 identified the qualitative elements usually considered by the various accrediting agencies in their assessment of graduate education for purposes of accreditation, regardless of mode of delivery. These elements are

1. clarity and appropriateness of objectives;
2. identity of the graduate and professional programs as administrative units;
3. qualifications of the faculty;
4. design and content of the graduate program;
5. Appropriateness of admission, retention, and degree requirements;
6. policies regarding academic credit by transfer, life experiences, or other nontraditional activities;
7. policies and requirements for off-campus or extension centers;
8. adequacy of supporting resources;
9. interaction and interrelation with the undergraduate programs;
10. evidence of educational outcomes.[7]

[6]Ibid, p. 22.

[7]Accreditation of Graduate Education, p. 6.

The essential characteristics of graduate education identified by Dressel and the qualitative elements identified in the COPA/COGS statement, recognizing that there is some overlapping between the two lists, provide the framework for quality in master's degree programs regardless of their traditional or nontraditional characteristics. The quality standards should be essentially the same for traditional and nontraditional master's programs. The establishment of different sets of standards for different types of master's programs will create an unacceptable situation for the degree recipient through a devaluation of the credential. Such an erosion of the meaning and value of the degree does not serve the best interest of the student, the faculty, the institution, and the public in general.

Turning specifically to the nontraditional master's degree, it should be noted that there should not be differences in the essential characteristics and elements previously mentioned for these degrees and the traditional master's. Appropriate differences in the degrees may occur in the operational and delivery processes in accommodating new and different student groups. Qualitative aspects affect the breadth and depth of the academic experience for both research and practice-oriented master's programs. The lack of careful attention to the qualitative aspects of the academic experience is a flow of many of the nontraditionalists. The maintenance of quality in nontraditional graduate programs is dependent upon the careful and thorough attention to the application of the essential characteristics for master's programs identified by Dressel. The application of these elements in the development of a program should be appropriate to

the goals and objectives established for the program and should be representative of the criteria and standards normally expected of quality graduate education.

In conclusion let me share with you a checklist identified by the COPA project on nontraditional education of the major criteria that should be considered either in planning new graduate programs or in reviewing existing ones:

1. Is the program consistent with institutional strengths, role, and purpose?
2. Has the need for the program been demonstrated?
3. Is there an adequate pool of students to justify the program?
4. Have the additional needs and costs in faculty, facilities, equipment, and library required to achieve or maintain quality been determined?
5. Are the available resources adequate for starting the program without depriving existing programs of needed support?
6. Do existing programs have the quality to provide an adequate base for development of an advanced level program?
7. Has the relationship of the program to existing ones in the institution been fully explored?
8. Is there available an adequate cadre of faculty of sufficient scholarly stature and experience?
9. Are the admissions policies clear and appropriate to the program?
10. Are adequate funds available for the support of graduate students?
11. Does the administrative structure provide for coordination or direction of the graduate program with the assistance of a faculty committee or council?

12. Has the curriculum been carefully developed in reference to the specified objectives of the program?

13. Are the opportunities for research, field experience, or internship adequate in quality and number?

14. Does the program have sufficient structure to assure its distinctive character, while remaining sufficiently flexible to meet the particular needs of individuals with varying goals and backgrounds?

15. Is the program generally consonant with standards and models existing in other institutions of quality? Is the rationale for innovative patterns clear, and are provisions for evaluations included in the plan?

16. Has attention been given to the auxiliary needs of graduate students, such as housing, food, and recreation?

17. Do provisions exist for insuring that graduate students have a voice in the formulation of institutional policies?[8]

Many educators, including a few rather prominent individuals, have concluded that restoring quality and meaning to the master's degree is a lost cause--that except for a few rare exceptions it has evolved to a mere fifth year of college with little of a truly graduate experience involved. I do not share this opinion. I firmly believe that a concerted effort on the part of graduate educators, faculty members, accrediting associations and other interested parties can and will restore the master's degree to a meaningful and enriching experience of quality.

[8]Dressel, pp. 41-42.

STANDARDS OF QUALITY AND THE PROFESSIONAL ACCREDITATION PROCESS *

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American Association of Colleges of Nursing

I had several problems in addressing this particular segment of the topic which was assigned to me - and for which I accepted responsibility. A rather fundamental problem was to keep reminding myself that I was speaking to standards and accreditation of professional education at the master's level rather than graduate education in general. While some issues overlapped both master's and doctoral programs I did my best to concentrate on the former. My sources of reference were limited to several of the health fields, psychology and, to a lesser extent, education. I would commend the planners of this conference for their concern about quality in masters education for the professions and feel it is timely if not overdue.

I have divided my brief presentation into two sections: These are:

Rethinking the nature of professional accreditation at the master's level: why it exists, its purposes, and realistic criteria which help produce a "quality graduate".

Problems which are inherent in agreement on standards of quality: their reflection in criteria for accreditation of master's programs.

Pros and Cons of Professional Accreditation

I will introduce my comments on the nature of professional accreditation by raising a question -- why is it necessary? What does specialized or professional accreditation do that the regionals can't do? Historically, I believe Congress first acknowledged the term "regional accrediting agency" in 1952 and the NCA (National Commission on Accrediting - now part of COPA) began operations

* Discussion presented by Marion I. Murphy, Ph.D., R.N., at conference on Assessment of Quality of Master's Programs, March 1-3, 1979, University of Maryland Center of Adult Education, College Park, Md.

the same year. It is my feeling that both the regional and professional accrediting bodies, despite less than perfect records, have gone a long way toward "fostering excellence" in higher education and all those other goals of accreditation which are familiar to us.

I suppose the most specific answer to my question as to the fundamental difference between regional and professional accreditation is that the latter must deal with practice as well as with academic standards. And there, of course, lies our main dilemma - for delineating standards of quality, translating them into objective criteria and applying those criteria to a variety of master's programs is truly a momentous undertaking! It is no wonder that in the health field each graduate program in the same institution follows criteria for evaluating clinical practice which its national accrediting body requires, probably deviating neither to right nor left!

It so happened that last year on the Baltimore campus of the University of Maryland the Schools of Medicine, Nursing and Pharmacy each had a reaccreditation visit from its respective accrediting body within a two-month period. I served on an advisory committee for the School of Medicine's self-evaluation report and was impressed with some similarities to nursing but more differences. The dean of Pharmacy invited the other campus health deans to have lunch with his visitors - the only one of the three schools to demonstrate our rather close inter-school interdisciplinary relationship. Incidentally, Medicine's self-evaluation report and visit were briefest; Pharmacy's next while Nursing's report was larger than the others combined. Its visit also was longest due to the visiting team's careful scrutiny of many clinical practice situations. I will amplify some of the practice issues in the later section of this presentation.

The practice component of professional accreditation was emphasized in a statement attributed to the (then) N.C.A. which said, "Professional accreditation is essential to protect society from mediocrity in the education process, students from being hoodwinked, and the professions from being downgraded by the entry of ill-prepared practitioners -- nothing else can help the institution, the student and the public -- as well as voluntary non-governmental accreditation."[1]

I would be less than truthful, however, if I did not call attention to the seemingly inevitable proliferation of specialized professional accrediting agencies with which institutions of higher education are confronted. A national listing of these agencies and associations a few years back numbered about 50 of which approximately half were in the health fields. The dilemmas associated with the possibility of accrediting even more health education programs has been well presented by Selden in the SASHEP reports of 1972.[2]

Problems in Developing and Applying Standards of Quality in Professional Accreditation at the Master's Level.

The problems are many and time will permit only an overview rather than suggestions for remediation or solution. I will list some problem areas without serious attention to priority.

The academic "research oriented" masters program vs the "practice oriented" emphasis: Evidence that this is an area of controversy is readily apparent in writings representing the larger health professions, in psychology and at least to some extent [illegible] education. In discussing Pharmacy's problem on a medical center campus, a dean[3] was of the opinion that one person's applied discipline was another person's basic science. He cited as an example that mathematicians

are apt to regard all other sciences as applied whereas politicians consider university-related social sciences as purely theoretical!

Such discussion of "the pure and not so pure" raises the question of any teaching of research methodology and its application to the student's clinical practice in n r's programs. Some of us would think it ridiculous and superficial not to utilize the opportunity to guide the master's student's thinking toward a marriage between principles of research and clinical practice. The goal would not be to prepare a researcher at the master's level - but we must not forget that the master's may be a last academic degree for many of our students. Moreover, the world of work which they hope to enter will expect them to have at least basics upon which further skills can be developed. Also, with the shift from a few traditional professional fields to the newer professions, a change in expected role becomes apparent. For instance, the vast majority of master's prepared professionals become employees - not independent practitioners.[4]

Related to the research vs clinical practice issue, of course, is the title of the degree; e.g., should it be an M.A. or an M.S.? Should it denote the profession -- an M.P.H., M.N., or other so-called "professional degree". I have chosen not to pursue this argument - no doubt reflecting my irritation from years of teaching graduate students who wanted to know which degree was "better"! My personal preference - and perhaps bias - is that master's degrees in the professions should be granted by the institution's graduate school - although I am very familiar with the pros and cons involved. My reason is associated with quality and I believe that graduate schools are in the best position to monitor quality.

If we want quality in our professional master's programs, why do our brochures advertise to prospective students that a thesis or project is optional?

Accreditation criteria are apt to at least mention certain expectations concerning some grounding in research as well as clinical practice. How does the school's self-study report describe how such criteria are met and how do accreditation visitors validate the evidence presented? In this connection in making a visit to reaccredit a master's program, I queried a department chairman concerning what seemed to be a lack of the students' preparation in statistics. Her reply was that they audited a statistics course in another school on campus. Further inquiry concerning the rationale for auditing elicited the reply that the nursing students really weren't prepared to cope with the course content -- they had no math at the baccalaureate level, etc. And yet the chairman thought they were meeting the criteria!

Professional education in Psychology also is harrassed by the dichotomy between research training and a newer more prevalent clinical emphasis.[5] Accreditation of Psychology's professional programs has been at the doctoral level but pressures have been mounting to accredit master's programs also. According to one source, however, such a step might involve a jurisdictional dispute with NCATE* concerning the accreditation of master's programs for school psychologists.[6]

Since literally all professions seem to be struggling (and not agreeing) how to describe and differentiate basic and applied research it was refreshing to find a more palatable substitute for the time-worn term "basic research" in a document recently received from the National Institutes of Health. It is simply referred to as a "science base" and includes what has been called basic research "plus many of the resources needed to maintain a broad capability

* National Council for Accreditation of Teacher Education

for scientific inquiry" -- in other words in this instance, the enlargement of the base of knowledge related to biology and behavior.

The aim of sufficient quantity: About ten years ago McGlothlin[7] reminded professional schools who "obtained a monopoly for qualifying entrants to the professions "that they also had assumed the obligation of supplying enough entrants. He advised that members of a profession and the professional schools should cooperate to assure that sufficient numbers of students be recruited and appropriately prepared. While many of us may resist his use of the term "monopoly", the master's program which has achieved professional accreditation does in effect have this right and privilege - as compared to a non-accredited program.

In previous writings I have been critical of my own field, nursing, for the very slow growth of master's prepared graduates.[8] Currently, only about four percent of nurses in active practice hold master's degrees in nursing. As a consequence, there has been a keen lack of masters prepared teachers for baccalaureate programs, a shortage of clinical specialists and those prepared for administrative responsibilities. Equally or more serious is the slow movement of nurses into doctoral study.

In our case, I believe lack of flexibility in admission criteria can be at fault accumulated to some extent by lack of innovative testing and/or provision for removal of clinical deficiencies. There are many nursing applicants who demonstrate academic ability but do not conform to all aspects of clinical eligibility. This situation is regrettable because, in many ways, nursing's history and experience in professional accreditation of baccalaureate and master's education has been exemplary.* For example, a conference entitled - Excellence in Nursing: The Role of Accreditation in Collegiate Education for Nursing was held in 1960 under the joint sponsorship of the National League for Nursing and the National Commission on Accrediting with President John S. Millis of Case Western Reserve University as chairman.[9] At that conference another university president[10] encouraged movement toward more flexibility in accreditation procedures and policies. He pointed out that it was appropriate to be less flexible in the beginning while working toward the goal of flexibility -- but cautioned not to wait too long - for experience should bring the confidence necessary for change.

One final word about a development related to accreditation in nursing which is "hot off the press", the pros and cons of which we believe may have impact on all professional accreditation.[11] A report entitled, The Study of Credentialing in Nursing: A New Approach, Volume I, January 1979, is the outcome of an independent study inaugurated by the American Nurses' Association in 1976. A study committee, made up of nurses and non-nurses of varied backgrounds, was charged to direct the conduct of the study. The committee enjoyed complete autonomy although the American Nurses' Association, as sponsor, provided the financial resources. Its main recommendation, the establishment of a National Nursing Credentialing Center, would unify and coordinate a comprehensive credentialing system covering both individuals (licensure, certification) and programs (accreditation of schools and agencies). The next step will be the appointment of a Task Force to guide implementation of the study's recommendations. We trust that the very complicated non-system for credentialing which exists in nursing at present will at last be responsive to a proposal which first and foremost is designed to benefit and protect the public. I feel sure that many of you will hear more of Nursing's Credentialing Study in the future!

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BIBLIOGRAPHY

1. Van Antwerp, Eugene, "Alternatives to Accreditation". Paper presented at Invitational Conference on Accreditation of Educational Programs in Nursing, Denver, Colorado, November 18-20, 1974. American Nurses' Association.

2. Study of Accreditation of Selected Health Educational Programs: Commission Report. Washington, D.C., SASHEP, One Dupont Circle, Suite 300, May 1972.

3. Coyan, Jere E., "Graduate Education in the Health Professions". Panel presentation sponsored by the Western Interstate Commission on Higher Education in Nursing (WICHEN) and University of Colorado School of Nursing, March 6, 1977, Albuquerque, New Mexico.

4. Selden, William K. "Pharmacy's Recognition of Forces Affecting Health Professions", Journal of the American Pharmaceutical Assn., Vol. NS 14, pp. 608-610, November, 1974.

5. Jones, Nelson F. "Professional Training in Psychology". Op. cit. Panel presentation sponsored by WICHEN (#3, above).

6. Kurz, Ronald B. "Emerging Issues in Psychology's Accreditation". Op. cit. Invitational Conference - ANA (#1, above).

7. McGlothlin, William J. "The Aims of Professional Education". Reprinted from The Professional Schools by William J. McGlothlin with permission of the Center for Applied Research in Education, N.Y., N.Y. Distributed by National League for Nursing, Inc., 10 Columbus Circle, N. Y., N.Y. 10019, 1967.

8. Murphy, Marion I. Future Issues in Nursing Education. Publication Series 78 - No.1. American Association of Colleges of Nursing, Washington, D.C., 11 Dupont Circle, 20036, 1978.

9. Millis, John S. "Nursing in Higher Education". In Excellence in Nursing: The Role of Accreditation in Collegiate Nursing Education. Report of a Conference under auspices of The National League for Nursing in cooperation with National Commission on Accrediting, St. Louis, Missouri, November 10-11, 1960. Published by NLN, 10 Columbus Circle, N. Y., N.Y. 10019. (p.1-8).

10. Reinert, Rev. Paul C., "Further Development of Accrediting Procedures". Ibid. p. 31-34.

11. The Study of Credentialing in Nursing, Vol. 1, The Report of the Committee. Kansas City, Missouri, American Nurses' Association, Inc., 2420 Pershing Rd., January, 1979.

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pattern of review is now being used to assess the quality of doctoral programs in the State, discipline by discipline.

Accordingly in that year we reviewed the master's curricula in 56 of the 82 institutions offering master's programs in the State. In all we examined 238 programs in Education, 235 in the Liberal Arts and Sciences, 98 in professional fields, and 29 in theological fields. Findings were published in a report entitled Master's Degrees in the State of New York, 1969-70.

Since 1979 we have devoted a certain portion of staff time to concentrate on master's programs so as to measure the impact of our comprehensive review and the report on the quality of master's curricula in the State.

Turning now to a discussion of the standards we apply, it goes without saying that statements of academic standards tend to be general. Much depends upon how these criteria are interpreted. Accordingly much of my commentary will focus on how the Department interprets the admittedly vague rhetoric of our Regulations. In passing, let me point out that our Regulations are being completely revised, a project that should be completed in the spring when we have had a chance to consult with the academic community in the State regarding proposed changes.

Curricula:

Our Regulations on curricula state that "Credit toward a graduate degree shall be earned only through work designed expressly for graduate students, in their areas of specialization, and enrollment of qualified undergraduates in graduate level courses shall be strictly controlled by appropriate institutional policies."

It is hardly necessary to point out that a crucial problem in American education today is maintaining traditional levels of student achievement. We all recognize that the high school diploma is a depreciated currency and that the

iously infected higher education as well. As you know, in
igher education there is a widespread practice of awarding
r remedial courses. A basic concern of the New York State Edu-
has also been the level at which some master's programs have

universities are commonly known to offer the same courses for
r undergraduate credit. Frequently the identical course is merely
tly for graduate or undergraduate credit. Undoubtedly, if care-
the requirements for graduate students beyond those for under-
e courses may be sufficiently high to justify the award of
However, additional reading and the writing of extra papers in
in themselves guarantee the level of endeavor that is appropriate
. There is no consensus on this point in the Department, but it
oncern and appears as an issue in our evaluations.
ly the reasons for granting credit at both levels are frequently
than academic. We have found that serious master's degree
ain because they are enrolled in courses that are not sufficiently
master's programs are intended to pyramid knowledge on a base of
dy, then programs that do not set a severe limit on the number
courses acceptable in a graduate program and set special condi-
conduct do not fulfill the expectations of a master's curriculum.
ergraduate students are to be admitted to graduate courses only
erior quality and carefully selected. In our experience most
struction to the average level of a class. If a class contains
udents with little background, understandably the level of
drop. Our evaluations are also critical of mixing indiscriminately

non-matriculant students or students without appropriate background taking general electives in classes intended for students with advanced knowledge of a discipline. If instruction is to be offered on a level of difficulty appropriate to a master's program, then there must be a relatively homogenous group of students capable of profiting from instruction at this level. The mixing of non-matriculants with matriculants in master's courses has been aggravated by the requirement in New York State that teachers must have either master's degrees or thirty graduate credits in order to be permanently certified. Instead of acting as a deterrent to the credentialing of persons who were not capable of doing graduate-level work, this requirement acted as a stimulus to institutions to provide credits for a captive market. Teachers could shop around for the cheapest and the least troublesome thirty credits resulting in the lowering of standards among competing institutions.

If a student did not meet the requirements for admission to a degree program, he/she could take courses in a non-matriculant status until qualified for certification. If the college limited the number of courses permitted in a non-matriculant status, the student would move on to other institutions until thirty credits were obtained. Out-of-State institutions also attempted to capitalize on the market, as well as quasi educational groups that contracted with colleges to offer instruction at locations far removed from the campus as if they were part of the colleges' approved programs. These developments posed serious problems for the Department in its effort to maintain quality in master's programs.

In these days when enrollments are leveling off or are already declining, undergraduate institutions in their eagerness to identify new populations of students understandably want to begin offering curricula at the master's level. All too often these institutions do not have the capability to offer graduate work.

premature entry into master's programs, in New York State the
graduate to graduate work is controlled by a master planning
a policy of the New York Board of Regents that institutions be
onstrate capability not only in the immediate area of a proposed
culum, but in auxiliary disciplines as well. In general this
the situation in which there is not a broad enough base of compa-
a quality master's program. Moreover, Regulations of the Commis-
tion prohibit the offering of graduate courses that are not a part
pproved programs. This restriction curbs the impulse of undergraduate
initiate offering isolated graduate courses, particularly to
needs of teachers to meet requirements for certification and pay

tions governing curricula also require that "The objectives of each
ite courses shall be defined and published, with a description which
ugh to make clear (1) what subject matter is addressed, (2) what
uctions is employed, and (3) how achievement is determined." This
Department's insistance on full disclosure.

concerned about the level of content in master's curricula, we are
ed about the qualifications of some faculty teaching master's

k we have found that the competence of faculty varies considerably.
ns do not have a selective process for the appointment of graduate
ese instances a person assigned to teach a graduate course auto-
matically considered to be graduate faculty. Feeling that graduate faculty
impressive credentials and background than undergraduate faculty,

our standards require that all graduate faculty possess an earned doctorate in their field of instruction, or have demonstrated in other widely recognized ways their special competence in the field in which they direct graduate students. Our criteria go on to say that "Each member of the academic staff shall have demonstrated by his training, earned degrees, scholarship, experience, and by classroom performance or other evidence of teaching potential, his competence to offer the courses and discharge the other academic responsibilities which are assigned to him."

Our reviews have identified serious deficiencies in the scholarly publications of some faculty. And institutions have not been uniformly responsible in carrying out our requirements that "The teaching and research of each faculty member shall be evaluated periodically." However, staff have been cautious in applying this standard, for undue stress on publications has resulted in much inconsequential research and writing. More emphasis has been placed on assessing the faculty members' current knowledge of their fields and their ability to teach. In our evaluation of master's programs we have, of course, sought the opinions of students. It comes as no surprise to learn that the impressions of groups of responsible students were not always consistent with the assessment of input factors such as academic credential publication records.

Our standards call for at least 50% of faculty teaching in each division of an institution to be full time so that the in-house committee chores may be carried out, student advisement performed, and so that there may be on hand a sufficient core of faculty whose primary loyalties are to the institution. By "loyalties" I mean a dedication to planning, building a superior library collection, overseeing and evaluating the activities within a program, and taking steps to improve programs on the basis of the evaluations. In our 1978 survey of

ations in Westchester County, our reviews found that this standard
d in all programs, particularly in professional areas. In spite
lone, we found some excellent programs carried on almost exclusively
culty. To adjust to these insights, in our revision of Regulations
t a current knowledge of the market place or the practices
rofessions may be more important than an insistance that a
faculty be full time. Whatever the modifications, however, we
there be a core of full-time faculty capable of performing the
to a quality program.

rds we set for students are typically general: "Admissions shall
t the capacity of the student to undertake a course of study and
the institution to provide what instructional and other support
complete the program."
ain how this criterion is interpreted in our evaluations. And I
rt here a word on how we try to get some consistency in the appli-
eneral standards as this one. The small group of team chairmen
tion teams work closely together and hammer out agreements--I use
ediy--on the specific application of standards. We don't achieve
, of course, but I think we do avoid an embarrassingly wide

this standard on admissions to graduate programs, the Department
some indiscriminating practices of the open admissions pattern
ears has characterized much of undergraduate education. We are
conflict between the rhetoric of free access to higher education
ions to maintain quality. In regard to graduate education, our

position is still an elitist one, but it protects the students, both the one who is unprepared and the one who deserves to pursue study which is truly at the graduate level.

In my comments on curricula I have already pointed out the Department's concern over the indiscriminate mixing of undergraduate and graduate students, non-matriculants and students specializing in a discipline.

Facilities:

The emphasis on facilities will, of course, vary greatly according to the character of the master's program being offered. Much of our attention in regard to facilities focuses on the adequacy of libraries. Our Regulations are typically general in this area, calling for collections in sufficient breadth and depth and adequate professional and clerical staff. In applying our standards on library resources we hold the position that every program should have a basic library collection on site. We feel that the use of library resources, the assurance that they are an integral part of the instruction, is more important than the size of the collection. And we assess the use made of library resources. When institutions tell us that they are relying on the collections of other institutions or on public libraries, we feel it is necessary to check out the use of these other facilities and the pertinence of their collections to the programs in question. If the institutions point to interlibrary loans, the statement is also checked out. We think the actual reliance of some institutions on outside library resources is frequently overstated. A few years ago the Commissioner appointed a Committee to recommend to the Department a set of standards for library collections. For master's programs these standards call for a collection of at least 85,000 volumes as a base for the undergraduate programs with additions for each full-time faculty member and student and for each curricula, as you recognize a

close to the Clapp-Jordan formula. For each master's program the
is 6100 additional volumes if there is no doctoral program in
r, let me add at once that our evaluations are not based solely on
. We look for the seminal journals and the books which provide
ort to graduate curricula. We find that institutions that are
rgraduate in their mission are more likely to have collections that
for serious research.

rvey of off-campus centers we found that some master's programs
se extension sites were grossly deficient in library support. The
holds true of most master's programs offered on military bases that
Alarmingly, we found that students in off-campus master's programs
no concern over the paucity of library resources, an attitude which
e character of the instruction. Our Regulations require that all
rams shall have as an integral component the writing of a thesis, a
ct, or a comprehensive examination. For some programs in professional
inclined to feel that a practicum or internship would be of more
research project, an attitude that will probably affect our insistence
library resources in some curricula.

n:

r injunctions regarding the administration of master's programs is
nt that administrative responsibility for the conduct of programs
opment of new programs shall be clearly established. We frequently
ual authority for master's programs rests in individual departments
n an office with centralized control. Although we feel that decisions
atters are more appropriately made in the departments, we believe

there should be centralized control. Oftentimes we find that graduate deans do not possess sufficient fiscal powers to exert strong leadership on curricular matters. The paucity of funds that they control at times makes it difficult to maintain adequate records, to conduct follow-up studies of graduates, and to evaluate their operations by means of external reviews. These concerns appear in our evaluations.

Our standards also require that administrations take responsibility for providing professional counseling services as needed and a program of academic advisement by the faculty as a part of each student's total learning experience. Although the marks we give institutions in this area very widely, we have found that the advisement of non-matriculated students is decidedly inferior to that provided matriculated students, as is true of part-time versus full-time students. Though members of these groups need expert help, often they receive only summary treatment. Master's candidates frequently complain that the faculty assigned to advisement were often ill-informed, not happy in their task, and perfunctory in their performance of it. We find that the excessive use of part-time faculty and the extension of master's programs to many off-campus sites erode the quality of student advisement.

Conclusion:

In concluding these comments let me be the first to admit that in this not best of all possible worlds our enforcement of the standards outlined here has not been entirely successful. I think we all recognize that these are difficult times in which to maintain high standards in education. For one thing the public has been conditioned to think in terms of convenience and ease. In these days the American public does not take kindly to the concept of sacrifice. The stress on

ied to the belief that advanced degrees are the birthright of all
all, the financial problems now faced by many institutions and
declining enrollments tempt colleges in their fight for survival
anderds.
nd those organizations that convened this meeting for their per-
roblems that face us and wish you all success in working for
r's programs.

WHAT IS THE ASSESSMENT OF QUALITY?

Bernard J. Downey

Villanova University

We have heard elsewhere in this Conference the significance of the Master's degree for the present and for the future. In the past year while approximately 35,000 doctorates were granted, there were nearly ten times that number of master's degrees - over 340,000. A very large portion of graduate education today is associated with Master's degree programs. It is abundantly clear that there is a major responsibility on the part of the institutions of higher learning granting these degrees to insure that these Master's programs are quality programs. In the first place it is a simple matter of justice to the students. No institution has the right to offer a mediocre program. Institutions have finite resources. It is simply not possible for all institutions to offer large numbers and great variety of Master's programs with the necessary quality.

We have heard presentations on the meaning of academic quality and on standards of quality. There remains the matter of the assessment of this quality. It is evidently particularly important for an institution to have the means of assessing the quality of its graduate programs in order that it may be able to make the correct decisions concerning such matters as allocation of resources, termination of programs, initiation of new ones, faculty appointments, tenure decisions, and the like.

An institution should be able to take a hard look at a program and within the context of its own resources make a determination as to whether it should

e to support such a program; (2) give increased support to the
o develop better quality; or (3) terminate the program. And this
the major purpose of quality assessment.

t precisely do we mean by the assessment of quality? Evidently we
g about methods to be used in evaluating the quality of Master's

Over the years many institutions have developed their own
procedures. In recent years many graduate deans and other
al administrators [1, 2] have proposed that it might be possible to
neral criteria for the measurement of the quality of graduate

Such criteria might then form the basis for the development of
ent which institutions could use for quality assessment.
you know, there have been a number of national surveys in the
al years which have attempted to evaluate and give relative ratings
f the nation's doctoral programs. Two such surveys, the Cartter
66)[3] and the Roose-Anderson Report (1970)[4] depended entirely for
ngs on peer evaluation of two items: (1) the quality of the graduate
nd (2) the effectiveness of the doctoral program. These evaluations
e by outstanding individuals in a given field. However, there is no
that these individuals necessarily had at hand current quantitative
ch matters as faculty publications, library and laboratory facilities,
y of instruction, student guidance or the placement of the graduates.
ore, such peer evaluation is not very useful with regard to specific
of program improvement. These studies were not really objective

evaluations in any sense even though the results may have been fairly accurate in rating doctoral programs in the prestigious American graduate schools. Partly as a result of the dissatisfaction on the part of many institutions with the single-faceted peer evaluation of doctoral programs, a joint effort was begun in 1974 by the Council of Graduate Schools and the Educational Testing Service to develop a multi-faceted approach to the assessment of the quality of doctoral programs. In this approach, an attempt was made to identify criteria which might be used to identify quality in each of the following categories: (1) faculty, (2) students, (3) resources, (4) learning environment, (5) curriculum, and (6) placement of graduates. Surveys[5, 6] were carried out by Dr. Mary Jo Clark and her associates of ETS which first resulted in the development of a set of criteria to be used, and later in the application of these criteria to the assessment of the quality of doctoral programs in Chemistry, History, and Psychology at a selected number of doctoral institutions. As a result of this study, a departmental profile was developed which an institution could use as the basis for making decisions concerning a given program. The full report[7] has been published as "Assessing Dimensions of Quality in Doctoral Programs: A Technical Report of a National Study in Three Fields" by Mary Jo Clark, et al, ETS, October 1976. A summary[8] of this report is also available.

Before considering a similar approach for master's programs, it might be well to address the question of subjectivity. Many of the proponents of the single-faceted approach of Cartter and Roose-Anderson state that even the

multi-faceted approach is subjective. In one sense this is correct. The Clark group first developed a set of criteria and then submitted these to a group of graduate deans and heads of departments[5,6] with a request for an evaluation of the relative importance of the criteria. Thus, the selection of the criteria was ultimately subjective. Indeed there must be subjective input as to what constitutes the significant criteria. However, consensus from the most knowledgeable individuals is the best means available for insuring the identification of valid criteria. And once the criteria are established, many if not all of these can be measured objectively.

In some of the previous papers given in this Conference as well as in my reference above to the Clark study, attention has been given to the elements involved in academic quality. Quite obviously, certain elements appear in all discussions of quality. These include: faculty, students, library facilities, laboratory facilities, computer facilities, the curriculum and the learning environment. For most if not all of these elements there are objective measurements which can be made of the criteria associated with them. There is one other potentially useful source of information concerning program quality, namely, the history of the graduates of a program. This may be difficult to measure objectively, but it should be included in the elements mentioned above. It might even be desirable to obtain employers' perceptions of the worth of the employee's graduate training.

Now, if I may, I would like to present a very brief history of recent CGS developments concerning quality assessment. Following the presentation of a

number of papers[9] on this subject at the CGS national meeting in New Orleans in December 1977, there developed a strong consensus among the membership for the need to address specifically the assessment of quality in Master's Degree programs. As a result, the Board of Directors of the Council of Graduate Schools established a Task Force to this purpose. This Task Force deliberated on the criteria which might be used in this assessment making use of the Clark Study as well as other sources which had addressed quality assessment of graduate education. Perhaps it is not surprising, that the same six elements mentioned above - faculty, students, resources, learning environment, curriculum and placement of alumni - again appeared as the basic elements relative to which the criteria should be developed. Using this foundation, a number of criteria were identified - some the same and some different from the doctoral criteria. These proposed criteria were then sent to the CGS membership with a request for an evaluation of their relative importance. A preliminary report[10] of the results of this survey was presented at the national CGS meeting in San Diego in December 1978. The Task Force now has this evaluation and on that basis is proceeding to develop a set of questionnaires which would be used in the evaluation process. There will be four questionnaires, one each for faculty, students, and alumni, and a fourth for quantitative departmental information. Hopefully, these questionnaires will be available within a year or so for those who would wish to use them.

It might be useful to consider a few of the criteria. Under faculty, such a simple matter as the possession of the terminal degree would be an example.

In the doctoral study, this item was eliminated since nearly all faculty in doctoral institutions have the terminal degree. This is certainly not universally true as far as Master's programs are concerned. Hence, it could be a valid criterion. Another item, the institution which granted the doctoral degree was considered important in the doctoral study. It is not considered so for master's programs since the connection with a high-powered research-oriented institution is not as significant for many master's programs.

Again, the creativity of the faculty was considered a high priority item for master's programs as it was for doctoral programs. This was particularly true for academic master's programs. On the other hand, it was agreed that a longer time period would be needed to identify scholarly and artistic creativity than should be needed for doctoral research-oriented institutions.

One final item I might mention regarding faculty has to do with the professional activity of the faculty. This was also considered important particularly for the professional and technical master's programs. This will be more difficult to quantify, but the effort should be made.

In the area of library facilities, such items as total book holdings and number of periodicals can easily be quantified. Here the relative numbers might perhaps be significant. Obviously, certain criteria in this area will be subjective, i.e., the perception of the faculty as to the adequacy of library holdings. This brings out the fact that not all desirable criteria will be able to be incorporated fully in national norms. Such criteria should, however, remain in the assessment instrument since the institution can at least use these internally.

Some criteria associated with student admission can be quantified and some cannot. In addition to the average grade point average of the admitted students (both overall and by major), the percent of students admitted who do or do not meet the minimum standards set up by the department should be included.

In the area of learning environment, much of the data will be subjective, i.e., the perception of students, faculty, alumni, as to the quality of such environment.

In the category of placement of graduates, again much data will be subjective, i.e., the perception of the graduate as to the fit between his education and his employment. Nevertheless, this can be very useful in assessing the effectiveness of the program.

I believe these few examples should be sufficient to give some idea of the potential criteria which might be used in program evaluation.

Assuming a set of questionnaires can obtain the required information, the question arises as to who should act as the evaluator of the information provided. This part of the evaluation process is independent of the questionnaires instrument, but is integral to the entire process. In many cases, both internal and external reviewers have been used. In other cases, only one or the other. I am using "internal" here as internal to the institution - not internal to the department being reviewed. Since the Dean of the Graduate School would normally have overall responsibility for program review, he should have the responsibility for insuring the appointment of internal and/or

external review teams. One method used by a number of institutions has been for the questionnaire information to be given to the external reviewer(s) prior to the latter's visit to the campus. This information will give the review team a basis on which to make judgments during and subsequent to the visit. As a result, the external review team will report its judgments back to the Graduate Dean. Both the questionnaire information and the report of the external reviewer(s) will be made available to the internal reviewers who will take whatever additional steps they consider necessary before making its final report to the Graduate Dean.

There remains to be discussed what will be done with the results of the quality assessment for a given program. Certainly, there are two possible uses for such assessment. One is entirely internal to the institution and provides a basis for decisions which can be made concerning the continuation of the program with or without the application of new resources, or the termination of the program. The other perhaps more controversial use might result from the establishment of a set of national norms relative to the criteria. This would permit the institution to assess the standing of a particular master's program relative to the same program offered at other institutions. Ideally, these ratings might be broken down: (1) regionally; (2) by institution size; (3) private vs. public, etc. This would provide the institution additional information for making the decisions mentioned above.

Parenthetically, I might add if such national norms were established, it would be very important that no specific institution can be identified in any way.

May I finish by stating that the institutional obligation to monitor program quality should always have a very high priority. Hopefully, the cooperative efforts of individuals and institutions in developing means of assessing quality will assist in this very important institutional function. And it may even be possible that in the very near future a set of national norms will be developed which will provide a valuable service to all those interested in maintaining quality graduate programs.

References

1. Proceedings of the Sixteenth Annual Meeting, Council of Graduate Schools in the United States, 1976, editor John W. Ryan, pp. 125-132.

2. Proceedings of the Thirty-third Annual Meeting, Midwestern Association of Graduate Schools, 1977, editor, Raymond P. Marcella, pp. 7-22, 38-47, 60-81.

3. Carter, Alan M., "An Assessment of Quality in Graduate Education", Washington, D.C., American Council on Education, 1966.

4. Roose, K. D. & Anderson, C. J., "A Rating of Graduate Programs", Washington, D.C., American Council on Education, 1970.

5. Clark, M. J., "The Assessment of Quality in Ph.D. Programs: A Preliminary Report on Judgments by Graduate Deans", GRE Board Research Report No. 72, 7aR, Princeton, N.J., E.T.S., 1973.

6. Clark, M. J., "Program Review Practices of University Departments", GRE Board Research, Report No. 75-5aR, Princeton, N.J., E.T.S., 1977.

7. Clark, M. J.; Hartnett, R. T.; & Baird, Leonard L., "Assessing Dimensions of Quality in Doctoral Education: A Technical Report of a National Study in Three Fields", Princeton, N.J.: Educational Testing Service, 1976.

8. Clark, M. J.; Hartnett, R. T., ETS researchers, "The Assessment of Quality in Graduate Education: Summary of A Multidimensional Approach", Washington, D.C.: Council of Graduate Schools, 1977.

9. Proceedings of the Seventeenth Annual Meeting, Council of Graduate Schools in the United States, 1977, edited by John W. Ryan, pp. 23-39.

10. Proceedings of the Eighteenth Annual Meeting, Council of Graduate Schools in the United States, 1978, editor, John W. Ryan, in press.

VALIDATION OF GRADUATE SCHOOL ADMISSION STANDARDS: A CASE STUDY AT THE UNIVERSITY OF MARYLAND

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The number of applications to graduate schools of business has risen dramatically over the past few years. Although programs have been initiated and expanded to help meet this demand, there are still far fewer places available than applicants. Thus, most schools use some means of selecting those applicants most likely to succeed in their program up to the number they can admit. While every application deserves review by a responsible admissions officer or committee to identify exceptional cases, to monitor errors and potential computer nonsense, it is possible for simple linear models to predict success, in some cases, at least as well as an admissions committee (Dawes, 1974). Such models should certainly be referenced in order to validate admissions criteria. Obvious benefits accrue to such analysis including adjustment and identification of relevant criteria, simplification of processing applications, and equity.

Review of Past Studies

Sixty-nine validity studies were carried out between 1954 and 1970 by graduate schools of business for Educational Testing Service (Pitcher, 1971). In all studies first-year average grades were the criterion against which the Graduate Management Admission (GMAT) scores and undergraduate grade point averages (UGR) were validated. Although the correlation coefficients ranged from -.10 to .60, the median correlation coefficient for UGR and GMAT total was .35. In some instances, the predictive model was improved by dichotomization of GMAT scores into separate verbal and quantitative

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The author thanks Professor Roger Pfaffenberger of Texas Christian University who initiated this research while at the University of Maryland. The help of Barry Weiss and John Potocko in collecting data is also appreciated.

scores and by the addition of a Candidate Excellence by School (CES) Index.[1]

During the same period, twenty schools had two or more studies carried out by ETS. Over time it was found that heavier reliance was placed on test scores for candidate selection, increasing score means and decreasing standard deviations, using up some of their validity.

In a study of Florida State University's Graduate Program in Management, Gayle and Jones (1973) used a multiple regression model based on the following variables:

GGPA = graduate grade point average (dependent variable),
UGPA = undergraduate grade point average,
GRE = graduate record examination score, and
AGE = age at time of admission.

The fitted regression equation, with standard errors in parenthesis, for 167 students was:

$$GGPA = 2.79 + .0007750GRE - .07888AGE + .005070UGPA$$
$$(.000161) \quad (.00304) \quad (.0531)$$

and the multiple correlation coefficient was .410. The t test of significance at the .01 level showed that GRE, positive, and AGE, negative, were highly significant. UGPA was not significant. The authors noted that minimum test scores and grade point averages used in admissions had removed some discrimination from these variables and that inclusion only of successful graduates did likewise for the graduate grade point average. An interesting finding was the negative sign for age. The authors postulated that older students lose previous academic skills and may, by virtue of greater career responsibilities, have less time to commit to graduate programs.

In a more recent study at Kent State, students enrolled in the M.B.A. program from Fall, 1973 through Fall, 1975 comprised the sample of 157 students. This

[1]The CES Index was the mean GMAT total score from each student's undergraduate college.

sample was preferable to the Florida sample because both successful and unsuccessful candidates were included. Here the variables were:

GGPA = graduate grade point average (dependent variable),
TGMAT = total GMAT score,
UGPA = undergraduate grade point average,
JSGPA = junior/senior grade point average,
HREQ = hours required in program,[2]
AGE = age upon entering the program,
SEX = binary, 1 = female
MINOR = binary, 1 = minority, and
PTFT = binary, 1 = part-time attendance.

Results of step-wise regression were:

$$GGPA = 1.56389 + .002665TGMAT + .295155SEX + .566663UGPA - .394643JSGPA$$
$$(.000871) \quad (.192579) \quad (.271345) \quad (.088185)$$
$$- .005170HREQ$$
$$(.002881)$$

The F significance level for a variable to enter the equation was set at .05 and the multiple R was .381. Interestingly, the significance of undergraduate point averages is similar to the ETS findings and differs from the Florida study. Although age was not significant, Deckro and Woonderberg (1977) noted that there were few students over 30 in the program. It may be that the negative correlation for part-time attendance shares the same causality with age in the Florida study. The authors thought that the positive relationship between program success and sex for women might have been due to the small proportion of women in the program.

Maryland's Validation Study

The analysis was based on data for 84 graduates of Maryland's M.B.A. program in 1976. The dependent variable was M.B.A. grade point average at program completion.

[2]The variable HREQ was a proxy for previous business experience, either academic or professional, on which basis some MBA requirements were waived.

independent variables are listed in Table 1.

TABLE 1

Variables Included in the Study

1.	GMAT	- Total GMAT score
2.	VERBAL	- Verbal GMAT score
3.	QUANT	- Quantitative GMAT score
4.	WORKEX	- Months of work experience
5.	MILEX	- Months of military experience
6.	MARRIED	- Binary, 1 = married
7.	USCITN	- Binary, 1 = U.S. citizen
8.	AGE	- Age upon entering program
9.	SEX	- Binary, 1 = male
10.	FULLTIM	- Binary, 1 = full-time
11.	QUALSH	- GRE Index
12.	GRADEG	- Binary, 1 = student holds other graduate degree
13.	UGGPA	- Undergraduate grade point average
14.	GPA60	- Junior/senior grade point average
15.	MAJGPA	- Undergraduate grade point average in major
16.	POSTBC	- Binary, 1 = student completed postbaccalaureate coursework
17.	HONORS	- Binary, 1 = graduated with honors

In addition to the above variables the quality of the applicant's statement of purpose in the program and the quality of letters of recommendation were coded using an ordinal ranking such as "very good," "average," "poor." This procedure was eliminated as the multiple regression coefficient was not improved. In future analysis we intend to treat these variables as dummies.

Limitations

Some range of minimum grade point averages and GMAT scores have always been referenced in admissions decisions using up, as noted in previous studies, some of the validity of these measures. At Maryland a 3.0 overall grade point average must

be attained in order to complete the program. This has limited the range of the dependent variable as well.

QUALSH is the mean GMAT score of all students from the applicant's undergraduate institution. Colleges with stronger programs in non-business areas may not be well represented by this measure. Thus, some alternative ranking of schools may be preferable.[1] The definitions of several of the variables, such as months of work experience may be too noisy to provide a true measure of their value.

Findings

Five variables were found to be significant predictors of success in the University of Maryland's M.B.A program. The results of step-wise regression analysis are reported in Table 2. The F-level to enter was .05.

TABLE 2

Step-Wise Regression Equation with Standard Errors*

$$\text{MGAGPA} = .97364 + \underset{(.000790)}{.0018720\text{PA60}} + \underset{(.000407)}{.000953\text{GMAT}} + \underset{(.062788)}{.17093\text{POSTBC}}$$

$$+ \underset{(.000685)}{.001614\text{QUALSH}} - \underset{(.083338)}{.186775\text{SEX}},$$

Multiple R = .62172

F-ratio = 9.83

Standard Error of Estimate = .2593

*Standard errors in parentheses

[1] A different method of weighting institution quality is discussed by Lewis R. Goldberg, "Admission to the Ph.D. Program in the Department of Psychology at the University of Oregon," American Psychologist (August, 1977), p. 667.

GPA60. The undergraduate grade point average for the last sixty credits was found to be the best predictor. This is not surprising as most studies reviewed reported some measure of the quality of previous academic experience as a significant variable. Total undergraduate grade point averages are more easily retrieved from transcripts and this may be the better predictor at other institutions. It would be interesting to see if the strength of these coefficients would vary for students with different undergraduate majors as many would postulate that certain majors are more difficult than others.

GMAT. The coefficient for the Graduate Management Admission Test (GMAT) scores was positive and significant. Educational Testing Service's publications caution that test scores should not be used by themselves and that only score differences of certain magnitude are reliable indicators of real differences. A study of the extent of bias in GMAT questions by subpopulation characteristics such as sex, race, age, and language fluency and a project to develop measures of noncognitive variables such as leadership are being developed by the Graduate Management Admission Council and Education Testing Service (1978).

POSTUG. The dummy variable measuring the presence of post-baccalaureate academic experience was positive and significant. These are students who may have taken program prerequisites after completing their baccalaureate in another major or students who have completed graduate work in other disciplines. This variable may begin to assume wider relevance in studies of this type as students from non-business backgrounds are attracted to MBA programs by the current strong job-market demand for MBA's.

QUALGM. The positive and significant coefficient for quality of undergraduate

institution supports the Educational Testing Service's findings for their CEB Index.

SEX. That other things being equal, women did better than men may be due to the fact that during the period observed fewer women graduated from the MBA program (n = 12), and this self-selected group may have had higher motivation than men or other women. A similar conjecture was forwarded by Deckro and Wounderberg in their Kent State study. This effect may "wash out" as the proportion of women in MBA programs rises.

Recommendations. A multiple R of 0.62, though high compared to some other studies, still leaves much to be explained. Accumulation of more studies, both over time and at various institutions, will be necessary to refine variables and maintain validity. Sample sizes for minorities and to some extent for women have been too small historically to generalize. More data for these groups are needed.

The efficacy of requiring submission of letters of recommendation is still uncertain. Research into job-market or other valid uses of letters of recommendation should be investigated to determine a better analytical model.

Finally, while gross measures of several variables were not significant in this study, better specification of these may improve the multiple R.

Dawes, Robyn M. "A Case Study of Graduate Admissions: Application of Three Principles of Human Decision Making." American Psychologist, Vol. 26 (1971), 180-188.

Dekro, Richard F., and Woundenberg, Henry W. "M.B.A. Admission Criteria and Academic Success." Decision Sciences, Vol. 8 (October, 1977), 765-769.

Gayle, John B., and Jones, Troy H. "Admission Standards for Graduate Study in Management." Decision Sciences, Vol. 4 (1973), 421-425.

Graduate Management Admission Council. GMAT Newsletter, (November, 1978), 1-9.

Goldberg, Lewis R. "Admission to the Ph.D. Program in the Department of Psychology at the University of Oregon." American Psychologist, (August, 1977), 661-668.

Pitcher, Barbara. Summary Report of Validity Studies Carried Out by ETS for Graduate Schools of Business 1954-70. Education Testing Service, October, 1971.

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METHODS OF ASSESSMENT OF QUALITY MASTER'S PROGRAMS II

Hanley, Katherine, and Ognibene, Richard. "Master's Program Review at a Small Institution."

Drs. Hanley and Ognibene observe that the graduate program review at a small institution offering the master's degree, but not the doctoral program, is a unique exercise. Unique in that, at most institutions, the graduate program review usually includes, and is keyed to, a doctoral program assessment. As a consequence, appraisal instruments and review formats usually reflect this common master's-doctoral linkage. Generally speaking, it is this recorder's belief that master's programs are distinctly different "organisms," much more so than is apparent in much of the programmatic and assessment literature.

If these observations are valid, it then follows that the review instrument and process should be tailored, as emphasized by the authors, not only to a master's only program, but also to the nature of the institution conducting the review. This seems to be especially important in a small institution such as the College of Saint Rose. In the presentation, the authors also emphasized that a pre-condition of the review process at Saint Rose was the conviction that the process should confront problems but not threaten faculty or departments. This, of course, is the "Catch 22" of any in-depth assessment. To confront problems but not be overly threatening, the process must focus on "contribution." The contribution that the appraisers, as well as the appraising process can make to the graduate faculty and graduate program being reviewed. The review must focus as much or more on program strengths as it does on weaknesses, as much on ways of contributing to the program as opportunities to be critical of the program.

In the discussion that followed the presentation, the authors noted that the intention at Saint Rose was to keep the review format and process rather simple and modest in scope. However, it was found that in some instances the modest format yielded rather lengthy and complex responses by program leaders.

Blood, Milton R. "Behavior Based Teaching Evaluations for Specific Education Programs."

As Dr. Blood points out, student evaluations of instruction are readily available, thus widely used as a means of evaluating teaching performance. However, response bias, undoubtedly, does influence these evaluations. For example, Bos and Zakrajsek (unpublished) found that administrator-administered evaluations, as contrasted to instructor-administered evaluations, resulted in elevated student perceptions of regular faculty and diminished student perceptions of graduate assistants as instructors. To counter such response bias, Dr. Blood advocated the BARS approach. The strengths of this technique are: (1) the behavior based approach avoids much ambiguous or, at least, loosely defined terminology and focuses on behaviors identified and defined by the student population carrying out the evaluation and (2) this behavior based evaluation does appear to have the potential to describe teaching in terms of actions, with much less chance of conveying an overall negative connotation. This is extremely important due to the fact that it is difficult, at best, for instructors to accept the critical comments from students, especially if the comments are broad generalizations. A system such as BARS which attempts to avoid such overall judgement is certainly desirable.

In the discussion which followed the presentation, a number of significant comments were brought to the floor.

Dr. Blood pointed out that this type of evaluation instrument is not readily transferable from program to program. To emphasize this, he pointedly declined to distribute to the group any copies of a complete BARS instrument. This program specificity is on the one hand a disadvantage and on the other hand an advantage. The advantage being the minimal response bias resulting from a program specific instrument.

It was also pointed out in the discussion that the validity of the BARS instrument had not been determined as that validity relates to an external criterion such as learning. Although this is true, it is worth noting that a student evaluation of instruction is not, and often is not intended to be, a measure of learning, but is intended to record student "perceptions" of the instruction. Student perceptions are, by definition, quite different from objective measures of learning. Since this is the case, added support is given to another one of Dr. Blood's statements, namely, that student evaluations of instruction should not be the only measure of teaching performance. Since they measure student perceptions, other measures are needed to obtain a reasonably valid evaluation of all of the aspects of teaching performance.

Paelet, David. "An Ecological Assessment as One Component in the Evaluation of Off-Campus Graduate Programs."

Dr. Paelet's emphasis on the influence of support personnel, the social environment, the physical environment, and the permanence-transience of an off-campus graduate program is quite in order. All too often, in this recorder's experience, the situation has been encountered in which the mere scheduling of a graduate or undergraduate class appears to be the extent of the "environmental concern" on the part of some segments of the university.

Two points in the presentation merit added emphasis. The first, directed to the focus of the conference, is the point that assessment instruments must give serious attention to the unique role and perspective of the part-time master's student. As different as the doctoral student is from the full-time master's student, likewise the full-time master's student is quite distinct from the part-time master's student. Although many urban universities offer part-time doctoral programs, it is typically the master's program that is programmed on a part-time basis. This lends added importance to the attention to the part-time student in appraisal of master's programs.

This emphasis on the part-time student in the program leads to a second point to be emphasized, namely, a consideration of the university's response to the part-time student juxtaposed to the commitment of the part-time student to the program. Dr. Paelet speaks and points to the "partially responsive" university as possibly a more significant factor than the part-time commitment of the student in the success of the off-campus master's program.

Ondeck, Carol M. "Validation of Graduate School Admission Standards: A Case Study at the University of Maryland."

Dr. Ondeck's paper adds to a considerable body of literature predicting success in graduate programs. As has frequently been the case, Dr. Ondeck observed that undergraduate grade point average and standardized test scores are major predictors of success. In fact, in the discussion which followed the presentation, the question was raised whether or not undergraduate GPA and GMAT scores were quite adequate as predictors of success, considering the additional time and cost of obtaining additional measures.

In addition to the aforementioned, this study includes post-baccalaureate coursework, the excellence of the undergraduate institution, and sex as predictors, to yield the .62 multiple correlation. Two limitations of this study were emphasized in the discussion: (1) the rather limited size of the sample (N=84), and (2) the limited scope of the sample, which included only admitted and subsequently successful students. This systematically excluded students who were not admitted or did not graduate, and, thus, limited the scope of the study.

Ms. Ondeck recognized the first limitation in her title, "....A Case Study....." The second limitation is also recognized, nevertheless valid. As the author notes, "this has limited the range of the dependent variable as well."

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The papers presented in this session by Ernest H. Schuttenberg, Daniel R. Hall, and William J. Whitmore are examples of programs which clearly speak to major concerns voiced throughout this conference. Dr. Kirkwood has expressed his concern for maintaining the credibility and integrity of higher education. President Toll has stressed the need for continuous interaction with professionals in the field as we attempt to establish meaningful minimum and extended standards for master's programs. Dr. Giles Brown of California has expressed some bewilderment and consternation at the overwhelming acceptance of Proposition 13 by the voters of his state, and has insisted that we must establish mechanisms by which our graduates can become our own best proponents.

External and Internal Sources of Data

In order to gather appropriate data for the assessment of outcomes of students in master's programs, a variety of reliable sources must be identified. These can generally be grouped into external sources, or data regarding graduates after they have completed the program, and sources internal to the current program.

In the Master's program in Elementary and Secondary School Administration at Cleveland State University, Dr. Schuttenberg's two-dimensional research relied primarily on external sources. His purpose was to evaluate the quality of administrative preparation by surveying both graduates who held positions in educational administration and their immediate supervisors. The survey asked respondents to assess various program components and also provided them an opportunity to make open-ended comments or suggestions. The findings of this research have given the faculty a basis for making curriculum decisions related to course development, course revision, and the development of self-study modules and other instructional materials. In addition, the

faculty is currently using internal sources of data by periodically assessing current students to design appropriate additional learning experiences.

Dr. Hall's paper illustrates a process of continuous program evaluation designed by faculty at Trenton State College which utilizes a broad range of external and internal sources of data. The purpose of this process is primarily to gain input regarding program efficacy from users of the program and its products by surveying and interviewing graduates and their employers. Techniques used are exit interviews, questionnaires, follow-up interviews, and internal review by a neutral consultant. Careful attention is paid to having supervisors of graduates assess program rather than personalities by selecting those supervisors who work with three or more graduates. Conditions necessary to implement this model are top administrative support, both financial and psychological, the internally generated motivation and participation of both faculty and students, and an understanding of the cooperative nature of evaluative processes and procedures.

Dr. William J. Whitmore and his colleagues at Southern Illinois University have utilized internal sources of data to assess student outcomes in the M.B.A. program. The faculty developed and validated criterion referenced examinations which serve as the program's comprehensive examinations. Findings are in the preliminary stage, but the clear indication is that the school has made advances in improving predictors of graduate grade point average and success on the comprehensive examinations. Additional positive features of this process are that students are more prone to examine course content to ascertain discrepancies from the common syllabus, and faculty are more interested in the evaluation process and in the design of courses and of the common syllabus. Two problems have been the development

of the criterion referenced questions and the determination of an appropriate cut-off score for pass/fail on the examination.

DELIBERATIONS OF THE COUNCIL OF GRADUATE SCHOOLS OF THE UNITED STATES ON THE MASTER'S DEGREE

BANQUET ADDRESS

By

MICHAEL J. PELCZAR, JR.
PRESIDENT, COUNCIL OF GRADUATE SCHOOLS IN THE UNITED STATES

At

THE ASSESSMENT OF QUALITY OF MASTER'S PROGRAMS WORKSHOP

UNIVERSITY OF MARYLAND UNIVERSITY COLLEGE
Center of Adult Education
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There are several characteristics of the Master's degree that have remained true throughout its history, from prosperous times up to the present era of austerity.

Change has been the constant in the history of the Master's degree. The work "Master" comes from the Latin, Magister, which means "teacher," and from the time of its origins, the Master's degree has been strongly associated with pedagogy.

It is an academic title of remarkable durability. Today, its value is debated by some and its meaning is a matter of universal disagreement. But it has been an academic standard that has commanded greater or lesser respect for 800 years.

Perennial controversies and questions surround this degree. The intellectual and educational worth of a given Master's can only be ascertained by consulting the holder's transcript and graduate school record. There is no consensus about the experiences that a Master's degree program should offer; there is no agreement on the skills and abilities that one who completes a Master's degree should be expected to have.

Since its establishment, the Council of Graduate Schools has argued that the Master's degree should be maintained and strengthened. We believe it must remain to designate an integral level of higher education and not be viewed merely as an ornament or a genteel and empty relic from the past.

The first Master of Arts Degree was given at the University of Paris in the 12th century. It was the highest degree offered by the Arts faculty, and it served as a credential for becoming a member of that faculty. The holder could also study toward the Doctorate in Medicine, Law, or Theology.

Gradually the Master's degree fell into disuse in continental Europe

or was granted, with little or no additional scholarly labor, as an adjunct to the baccalaureate. Being the highest earned degree in England and subsequently in America, it retained greater prestige there for a time. In 1642 when Harvard graduated its first class, the Master's degree indicated rigorous academic achievement: three years of study beyond the bachelor's level.

However, by the early 19th century, the Master's at Harvard as well as at all other universities in the United States had little if any meaning. It was commonly awarded after the satisfaction of the most minimal requirements. The latter were summarized, in student language, as "keeping out of jail for three years and paying the five dollar fee."

The University of Michigan is often credited with reviving the Master's degree. In 1858 its regents resolved that the Master's be conferred on holders of a baccalaureate, provided they pursued two courses each semester for one year, passed an examination in at least three of the studies, and presented a thesis.

The state universities of North Carolina and Georgia adopted these requirements soon thereafter. By the beginning of the 20th century, variations on these requirements characterized Master's degree programs in most institutions.

The Master's degree achieved its own identity, separate and apart from the doctorate, when colleges and universities began to expand their offerings in education and to admit women to graduate study. In 1939 it was estimated that 3/4ths of liberal arts Master's degrees were earned by public school teachers.

In the late 1950's, new demands upon teacher education began to impose new burdens upon, and expectations of, the Master's degree.

There were at least three forces at work in this process.

In the aftermath of Sputnik, elementary and secondary education was

expected to improve the quality of the basic instruction it offered. This popular demand sent teachers back to school in great numbers for Master's degrees.

Second, the professionalization of secondary and elementary education administration encouraged graduate schools to increase and diversify their Masters' programs in these areas.

Third, the recognized failure of Ph.D. programs to produce college teachers -- as distinct from researchers who also taught -- prompted some educators to call for acceptance of the Master's degree as sufficient credential for undergraduate teaching.

The Soviet space achievements laid another expectation on the nation's graduate schools. They were asked to assume the burden of preparing scientific and technical specialists who would enable the United States to regain superiority in this and related areas. Congress enacted a number of programs that provided fellowships and traineeships toward this national objective. However, these principally assisted graduate schools in the support of Doctoral training. This was a symbol of the times as far as graduate education was concerned. In the gathering commitment to advanced studies, it was the Doctorate, and not the Master's, that received special attention.

The Council of Graduate Schools was established in 1961. The growing national interest in higher education - and the problems that usually attend rapid growth - were two of the reasons that led 100 institutions of higher learning to found the Council.

The neglected state of the Master's degree was addressed at the first annual meeting of C.G.S., held in December of 1961. The audience heard one speaker say that the major use of the Master's was as a "polite exit permit" from Doctoral programs. Two other widespread uses of the degree were

unhappily noted:

It was sometimes regarded merely as an intermediate step to the Ph.D.

It was often pursued by students who simply wanted to test whether graduate school -- that is, a Ph.D. program -- was really for them.

Despite this discouraging picture, the hope persisted that a revived or restructured Master's degree was the answer to the nation's need for college teachers, at least at the undergraduate level, where resources were being strained by the first crest of the "baby boom."

At the annual meetings of the Council of Graduate Schools throughout the early 1960's, speakers proposed ways to turn the Master's degree to this purpose. For example:

- The "M.A.-3", a three-year Master's program designed for persons interested only in college teaching and not in Research
- The Master of Philosophy program at Yale, which had similar objectives
- The recognition of the M.A. or M.S. as the terminal degree for teachers at junior colleges

Outside of education, the Master's degree was, by the mid-1960's, coming to be regarded as the final degree for certain other professions. The "practitioner" Master's was the fully acceptable credential for

social work (the M.S.S.W.)

planning (e.g., the Master of Urban Planning)

high-level business management (the M.B.A.)

Groups and associations within these professions sought to shape these

Master's degree programs according to their concept of what individuals who practiced them should know, exercising considerable influence over requirements.

In 1965, the Council of Graduate Schools reaffirmed the value and importance of the Master's degree.

C.G.S. declared the M.A. and M.S. to be an "appropriate means for recognizing the completion of one- and two-year graduate programs that are research-oriented."

C.G.S. said further: "The M.A. or M.S. indicates a significant level of achievement beyond the Bachelor's Degree."

The resolution concluded: "It is important that these basic programs be maintained and strengthened in our graduate schools."

Significant changes for all of graduate education were on the horizon during the second half of the decade of the 60's.

The Civil Rights Movement was calling attention to the underrepresentation of minority people in graduate schools and in the professions.

The draft to support the widening war in Viet Nam began to affect men students' plans for graduate study. By 1967, induction of male graduate students, often in the first year of a Master's program, would become routine.

Graduate schools also felt a new strong surge of women applicants, many of whom sought Master's degrees in education and the humanities on a part-time basis.

With the student ferment of the late 1960's, graduate schools were required to surrender the sense of apartness they sometimes felt from the larger campus community and to respond to challenges posed by the activists.

A number of student demands had implications for the Master's degree.

Dissatisfaction with "irrelevant" courses and "meaningless" requirements were heard at the graduate as well as at the undergraduate level.

Insistence by undergraduate students that faculty members have a commitment to undergraduate teaching perpetuated interest in the Master's degree as a sufficient credential for this purpose. As applications to college continued to swell, some experts predicted that a significant proportion of college instruction would be done by teachers whose highest degree was the Master's.

By 1970, the 10th anniversary of the Council of Graduate Schools, attendees at its annual meeting were told that:

- Among all four-year institutions in the United States an average of 39% of faculty members held the Master's as their highest degree.
- Among all two-year institutions, the figure was 73%.

The criticism from the "New Left" that graduate schools were guilty of processing students for a dehumanizing technological system fostered new expressions of concern for social problems by all of higher education. Some new Master's programs were specifically intended to address such problems, for example:

- urban studies
- ecology and environmental studies
- Black studies
- women's studies

Because these were new disciplines and sometimes fashioned from old ones refitted to new terminology, they tended to refuel the long-standing controversy about "quality" and Master's-level education. The theme of the Council's Annual Meeting in 1970 was Reassessment.

Political radicals were not alone in their disillusionment with graduate education. There was widespread dilution of public support and faith in higher education in general, which extended to advance studies.

The Nixon Administration, citing a supposed "glut" of Ph.D.'s, began to decrease the Federal programs that sustained graduate education and research. Master's programs, which had benefitted from a spillover of quality faculties and facilities that had concentrated on producing doctorates, suffered from the retrenchment.

For the first time in 300 years, American higher education was facing a zero growth rate. Demographic projections showed a decline of students at all levels and thus a restricted job market for teachers, who had once been the professionals chiefly interested in the Master's degree.

There was no sign, however, of any waning in the popularity of the Master's. More and more of them continued to be awarded. In 1959-60 the nation's colleges and universities had bestowed more than 74,000. In 1969-70, more than 190,000 were awarded, an increase of more than 240% over the first ten years of the Council of Graduate Schools.

At the same time, there was a vast proliferation of titles for Master's degrees. One C.G.S. annual meeting heard an estimate of 200 different titles. Inevitably, the meaning of the designation suffered. In the words of former C.G.S. president, Gustave Arlt:

> "The Master's Degree meant so many different things in so many universities and colleges, and there were so many differences among departments within the same university that no one could possibly know the meaning and value of a particular degree."

With the end of the military draft, many individuals pursuing college-level studies demanded that these be pertinent and applicable to a career. Graduate deans and others attending the C.G.S. annual meeting in 1972 were told: "The newest version of 'relevance' is vocationalism."

The Master's degree soon became an objective of several new groups of students who, by and large, were represented in small numbers in the graduate school in the past. These included:

PART-time students who were pursuing a full-time vocation at the same time as they were seeking their degree. The proportion of graduate students pursuing the Master's part time would continue to rise throughout the 1970's.

- Women
- Minorities
- Older adults

Considerations at C.G.S.'s annual meetings were shifted to the special needs of these students -- for credit options, financial support, and availability of external programs. How to insure that ever-elusive characteristic of "QUALITY" became a topic of controversy with these as a result of these changes.

Amid innovations that would accomodate new populations of students and other changing constituencies of graduate education, there appeared new signs of the vitality and value of the Master's degree.

As Master's degree holders sought employment outside academe, they asserted the value of the graduate school experience. They had grown, they told their prospective employers, in:

- capacity for critical thinking
- self-discipline
- communication skills
- research ability

This group was in the vanguard of creating a new public understanding of the value of graduate education at the Master's level.

A number of C.G.S. initiatives developed that were intended to give a more definite meaning to the Master's degree. One of the most forceful came in 1976, when the Council recommended that the titles for Master's degrees be stringently limited. Under the guidelines proposed by C.G.S.:

- The M.A. and the M.S. WITHOUT FURTHER DESIGNATION would be the degrees awarded for completion of Master's programs oriented to scholarly research and subject-teaching.
- The Master of Education, the Master of Business Administration, the Master of Music, and so forth would be the degrees for completion of professionally oriented programs.
- Beyond these, the number of names used for Master's degrees would be held to a minimum.

The 16th annual meeting of C.G.S. was preoccupied with the subject of measuring quality of Masters' programs. This followed naturally on an earlier development by C.G.S. and the Graduate Record Examination Board, namely a project for the assessment of quality of doctoral programs. Action was taken to extend this activity to the Master's degree level.

Dean Bernard Downey of Villanova University is Chairman of the C.G.S. Task Force working on this; he and his committee have reported to you on the status of the project.

Hopefully, C.G.S. working with other appropriate groups will be able to bring this development to a practical reality by the end of this calendar year. Let me stress that we view the quality assessment technique developed by the task force as a beginning. Many modifications and improvements will certainly evolve once the process has benefitted from "field experiences."

At the 1977 Annual meeting of C.G.S. I chaired a panel on the subject of the C.G.S.-E.T.S. Assessment of Quality of Doctoral programs. Among other issues, the panel considered the degree of applicability of the Doctoral

assessment program to the evaluation of Master's programs.

Dr. Herbert Weisinger, a member of the panel and then Dean of the Graduate School at SUNY-Stony Brook, had this to say:

> "Thus, it appears to me that it is desirable to go forward with the application of assessment of graduate education at the master's degree level using the multi-dimensional approach of ETS/CGS.
>
> If it is necessary that graduate schools show that they are engaged in a substantive systematic review of their master's programs, and that the use of these reviews are utilized in making decisions about the program and the school, the methodology under discussion can provide such review.
>
> The methodology can be modified for use at the master's level. In my opinion, it can be used with other procedures for program evaluation.
>
> The methodology has captured the imagination of faculties at several institutions.

Perhaps the CGS/ETS methodology for assessing

quality applied to the master's degree

level is like Sears Roebuck Co.,

"It has almost everything."

Or perhaps the multidimensional approach

is like Bayer Aspirin,

"It Works Wonders,"

Or like Tide, "It gets the stains

out that others leave behind."

Or like VO Hair Spray,

"It holds through all kinds

of weather."

And finally, like

Alka Seltzer,

"Try it,

you'll like it!"

I will close with these generalizations:

- The Master's degree is the growth industry of graduate education. It is growing and it will continue to grow more.
- It is a level of higher education that a larger and larger percentage of society will continue to seek to satisfy their personal desire for educational advancement.
- It is a level of higher education that society needs in order to address, more satisfactorily, increasingly complex problems.
- It is a level of higher education needed by a larger sector of society so that our <u>leaders</u> have better informed (educated) followers.

Let us not forget that we, in this room, have a lot to do with making the Master's degree what it is and what it will become. We should work toward effecting changes which should result in a level of recognition and prestige for the degree which it does not presently enjoy.

STATUS OF MASTER'S DEGREE PROGRAMS: CONFERENCE OVERVIEW

Kenneth D. Stewart
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INTRODUCTORY REMARKS

tein and Dr. Rankin did you know that there are only two things worse
3rd out of 61 persons speaking on the same topic?
weks ago I began trying to anticipate what would be said and what
said at this conference. I am pleased to report that what I antici-
be said has been said, many times, and of those matters I thought
discussed only one or two either were not said or were not emphasized.
have chosen today to say some of the things others have said but in
rent way.
you who have not sat through and/or read the many presentations at
nce, please forgive the style of this presentation. A "cast" of
cluded in the next section to assist your reading of this paper.
esenting my reactions to the conference in a way that I hope will be
ful to the participants. My remarks will be brief. I will be
ly because I would like for you to allow the ideas and images I will
a chance to sink in and a chance to be enjoyed.

BLIND MEN AND ELEPHANTS

Once upon a time in a far away country seven blind men were asked to examine and describe an elephant. I believe you know the results of their effort - seven different descriptions of the elephant depending on the part of the elephant they touched.

CAST

Blind men and women: Conference participants, includes Deans, Presidents, Directors, Faculty, etc.

Elephants: Master's degree programs or Master's degree students.

Tigers: Doctoral programs or doctoral students.

Hyenas: Undergraduate programs or undergraduate students.

Flying Tigers: Faculty and/or administrators who operate certain types of low quality off-campus Master's programs. Type one travels in "hit squads", uses non-regular faculty almost exclusively, and rarely returns to the scene. Type two travels in "bad squads" and uses regular faculty to teach the program.

Another time and another place, in a large country which prefers to do things in a big way, two hundred blind men and women (leaders from all across the land) were asked to come together and to describe the status of another elephant - the Master's degree. Of course, their descriptions depended upon which part (if any) of this Master's degree elephant they touched. Let's examine what they did.

Some of these blind men and women (perhaps influenced by philosophers in their past) said "you certainly can't touch or measure all of a quality elephant, but you will know one when you see it"!

Some blind persons from the large universities did not really touch the elephant at all. They simply knew the elephant was dirty and smelly and could not possibly compare with their favorite beautiful animal - the tiger - sometimes

known in the Western World as the highly intelligent and scholarly Ph.D. tiger.

Many others, from large and small universities alike, touched the elephant's tusks and immediately knew that he was made of ivory and was as good as gold, or money in the bank, or better yet, credit hours generated! Of course, those in this group who did not have any elephants of their own, decided it would be a good idea to have several. Especially, since in the next ten years, laughing hyenas would be in short supply, and since more and more laughing hyenas were going to try to become elephants.

Fortunately, others examined the elephant's legs, and his trunk, and his heart, and even checked his memory. They decided that he was a potentially valuable, hard working animal who might some day, in some way, in some places, be even better than a tiger, if we were innovative and trained him correctly and trained him for the right purposes. In any event, after we trained him, he definitely should be better than a laughing hyena. As an aside, I should mention that one of this group suggested that if we checked our elephants in 17 places we would really get to know him. Others either doubted this or (it seemed) didn't really want to check their elephants in all of those places.

Within this last group we further decided that training the elephant's legs, trunk, heart, and memory with a great deal of care, individual contact, and thoughtful planning was far more important than the ivory in his tusks. We know that if we do not train them well, when our elephants leave us they will be simply untrained, unable to cope, tuskless animals, who certainly don't belong in the jungle competing with tigers.

One of our group made it very clear that "flying tigers" (apparently a recent mutant) either in "hit squads" or "mod squads" are suspect, and may need to have their wings clipped. Otherwise, they might capture all of the elephants for themselves.

Other issues left unresolved included such matters as: Should we compare our untrained elephants with each other? Should we describe an average or normal elephant? We might, as a result, wind up with no elephants trying to be better than average.

Should we at least make follow-up comparisons between our trained elephants? Should we compare our elephant's performances against some professionally standardized performance criterion? Should we compare elephants on the same bases as we compare tigers? or laughing hyenas? Some felt we should leave it to the jungle to decide which elephants are trained well enough. Others did not trust the judgment of the jungle. After all, the jungle may not adhere to the same values we do.

Finally, the myth held by some in this conference that tigers are merely clones must be dispelled. The fact is, all tigers, in a previous life, once were hyenas. Also, some tigers have led two previous lives, as hyenas and as elephants. The quality of these earlier lives may well have something to do with the quality of our tigers.

Enough of this image. From this point on when I speak of Master's degrees or Master's students you will have to create your own elephant image, and when I speak of faculty, you will have to translate that into your own image - possibly "young or old tigers struggling to survive." I hope you understand that beyond enjoyment, my purpose in using these images has been to help us see ourselves, our attitudes, and our issues more clearly. I definitely did not intend to demean hyenas or elephants.

CONFERENCE THEMES

We seem to have agreed that the Master's degree does not have the status that it should in many of our institutions, either prestigious institutions or others. We seem to have agreed that assuring the quality of the Master's degree

is vitally important because our integrity and, eventually, credibility are at stake. We have agreed that quality graduate education is not simply a matter of transmitting information from instructors to large numbers of students. We have also agreed that establishing the importance of quality considerations in higher education to the satisfaction of political leaders and the tax payer is a formidable and very important task. Further, we seem to have agreed that assessment of quality must be relative to the particular goals of the particular program being judged. While we did not agree on the specific means or methods or sources by which we can assess or insure the quality of the Master's degree, we moved to a position that I would summarize in this way:

> To insure the quality of the Master's degree, we must: (1) put high quality students together with high quality faculty; (2) make available to them high quality materials and resources; (3) make sure that generous chunks of time are available for students to interact with faculty individually or in small groups and to interact with each other; and (4) arrange matters so that students must deal with the literature and other resources of their discipline.

Beyond these general statements I would like to suggest a few specific dimensions which others at this conference did not, I believe, emphasize enough.

First, when viewed in the context of Masters level training, high quality faculty are not simply people with degrees from prestigious universities -- they are motivated, committed people who take their "teaching" responsibilities (I don't mean lecturing) seriously enough to make time for their students. They are good models of their profession -- whatever the profession -- good researchers, good teachers, good counselors, good nurses who make sure students have the opportunity to observe them in the process of doing research, doing teaching,

doing counseling, doing nursing, and so on. Along these lines we might better look at such criteria as office hours, amount of time actually spent with students, student reaction to the faculty member's physical (and psychological) accessibility, etc. in our assessments of program quality.

Second, we have paid attention to the initial quality of faculty, but not enough attention to how faculty continue to be productive. In order for a good faculty member to sustain a high level of quality and commitment to the role of mentor, certain conditions must be met. His or her department, his or her institution, and if there is one, the state system in which faculty work must pay attention to their morale. We must treat the faculty member and academic departments fairly and equitably, must involve the faculty member in decisions, and must demonstrate that faculty efforts are truly valued. For example, in our own state system here in Maryland, we have inequities in treatment which are creating morale problems among faculty and will, if allowed to continue, reduce quality in many of our programs.

Thirdly, quality students are not just high GRE's or high GPA's -- they are also committed, motivated, persistent people with a capacity for sustained work. We must explore reliable ways to include these qualities and other important characteristics of students in our assessments. When we do so, the quality of students admitted to our programs will be even more closely related to our student learning outcomes.

Fourth, I wish to underline one of the points made by Dr. Epstein (whose perspective does not appear to have been narrowed by her form of blindness). The sources of quality in a Master's program may or may not be the same sources as those in a Doctoral program. Further, some of the sources of quality in a Master's program may be more like the sources of quality in undergraduate programs. Our assessments need to reflect this.

There were, of course, many other areas of agreement which were expressed in this conference. There were also many other important issues and disagreements which I have not commented upon. Some of those were explored in the presentations of Dr. Epstein and Dr. Mankin which follow this presentation.

I will simply close my statement by saying that I believe this blind man's vision is improving. I believe we made a good beginning on the problem of identifying ways in which we can take better care of our elephants. I hope we care enough to do so. I hope society cares enough to help us do so.

QUALITY ASSESSMENTS OF THE QUALITY OF MASTER'S PROGRAMS

Joyce L. Epstein

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The comments of the previous speaker confirm that evaluating master's programs is a mammoth problem. Indeed, the assignment to sum up the collection of conference papers on the responses being made leaves me somewhat nonplussed. The dilemma stems from the need to separate two topics that are purposely linked together most of the time--the assessment of the quality of master's programs and the quality of the assessments. The first issue--the topic of this conference--has been debated for over a century whenever master's programs have been examined (Barnlson, 1960; Snell, 1965; Walters, 1965). The second topic determines whether the responses that are made should be taken seriously. At this time, when sensible and sensitive assessments seem possible, it may be especially important to highlight several issues that may influence the quality and usefulness of the assessments.

The papers presented at this conference show a healthy mix of skepticism and optimism in a four-way attack on the assessment of master's programs. Discussions and plans, evaluation projects, theoretical studies, and the development of standardized instruments are in progress. The discussions and plans are analytical, with the aim to identify the concepts and measurements necessary to make assessments that can be useful and accurate. There are several serious, creative attempts by individual researchers, colleges and universities, and departments within colleges to assess with multivariate models all or some aspects of their master's programs. In addition to these practices, there are scholarly efforts to study and improve the theoretical models for evaluation of master's programs. Finally, there is, in progress, at least one effort to prepare a standardized assessment instrument. These approaches are likely to result in the first real advances in assessment of master's programs in over one hundred years.

Several issues are underlying these responses to assessment that deserve special attention for their impact on the quality of the assessments. These issues, discussed sometimes fleetingly, and sometimes perceptively in the conference papers, are highlighted here: internal or relative assessments; school conditions or student outcomes; single or multiple measurement models; and ratings or effects studies.

Internal or Relative Assessments. One opinion that seems to have gained consensus is that the main purpose of assessment is self-study, and that results of assessments will guide departmental reforms through internal decision-making mechanisms. Program administrators and faculty seem to agree (or wish) that master's program evaluations should provide information to improve program effectiveness and should not be used to compare programs within or across universities. There are, however, fiscal and physical, political and polemical, geographic and demographic conditions that make this emphasis on self-study unrealistic. As much as an English, engineering or education department could benefit from internal or absolute evaluation, when the monetary crunch comes and when the politics of the guillotine must be played, the full set of master's programs at a university, and even within a state or region, will be compared. On the basis of their relative merits, one or more will feel the axe. A recent study by the Council on Graduate Schools shows an average of 75 master's programs terminated each year from 1971-1976 (Chronicle, 1977). Such decisions are made with or without reliable data on the quality of the programs within or among schools. "Duplication" or "overlap" are favored words when consolidation or revision of programs within an institution or region is required.

This reality may be interpreted to mean that master's programs may be best served with assessments that make clear the unique contribution the program

makes to the university, to the students, and, in many cases, to the local or regional educational and occupational arenas. The identification and measurement of the unique contribution of a program to the institution, students, and work world requires three different sets of measures in an evaluation. Typically, assessments have been very general, concentrating on the conditions of the university or department of which the master's program is part, and have given little attention to student outcomes or contributions of the program to the occupational and community arenas. By design, general assessments restrict the variation in program differences and encourage comparisons across programs without making useful distinctions among programs.

It is unrealistic to imagine that self-study will be or should be the only use of assessments. Given the fluidity of the creation and demise of master's programs, it is important that some external reviews and research on program quality are conducted. Evaluations of program standards and resources that are too general can be costly in terms of money, time and/or unfulfilled expectations. General evaluations rarely contribute information on which to base internal plans to improve educational programs and services. For high quality assessments of the quality of master's programs, for departmental self-study and for informative relative comparisons across departments, a standardized or general form may be a useful but insufficient guide. Assessment devices must capture the program's unique contributions to the institution, the students and the wider social scene.

School Conditions or Student Outcomes. There is a history of agreement on the importance of assessing the faculties and facilities of a university for their contributions to the prestige of educational programs at the bachelor's, master's and doctoral levels. There is also a history of judging programs by the charac-

teristics, grades, and test scores of the incoming students. Too little attention has been paid to the importance of short term and long term outcomes for students participating in programs. Student outcomes are the ultimate measures of the quality of any program. Because of the occupational purpose and the diversity of specialties of most master's programs, attention in assessments to short and long term outcomes for students may be especially pertinent.

Short term outcomes include students' reactions to the program while they experience it, including reactions to the process of education, increments in learning, and relations with and assistance from faculty and administrators. Short term outcomes also include students' first job placements, initial income levels, or the next academic enrollments. The individual and aggregate consequences of a master's program must be assessed (for departmental self-study and for comparative analyses) after taking into account the abilities and experiences the students brought to the program at entry, and with consideration of the faculty and other resources available to and used by the participants in the program.

Long term outcomes include students' evaluations of the master's program six months or a year or more after completing it; also, the comparison of the income and prestige levels, and evaluations of the quality of life of former students with similar students who received a bachelor's but no master's degree from the same department. In addition to surveys of and interviews with former students, university records of graduates' placements and advancements and employer evaluations would be useful indicators for the assessment of program benefits to students. The most complete picture of master's program impact on students is drawn from data collected over several years for several cohorts of students.

The underlying questions are: What does "quality" of a master's degree program mean to the student during and after the program? Is the time and effort spent in a master's program "worth it" in terms of monetary and other compensations? Quality assessments of these issues can be useful for self-study or comparative study for guiding program improvements in a different way from assessments that examine only faculty productivity, number of Nobel prize winners, library holdings and the like. Assessments of short and long term student outcomes can suggest which volumes to add to a library collection, which courses to add or subtract from the offerings, which faculty specialists to hire, and how to improve the kind and quality of work demanded of students to make the program more useful for their professional and/or academic development.

Without attention to the practical effects of an academic program, an assessment measures only what a program is, not how it is doing. This distinction is akin to the difference in measures of reliability and validity of tests. The conditions and perpetuation of an academic organization is a necessary but insufficient focus for program evaluation. Quality assessments of the quality of master's programs must include measures of student outcomes, obtained during and after completion of the master's degree.

Single or Multiple Measurement Models. Another issue on which there appears to be consensus is the appropriateness of considering the master's an advanced degree, worthy of esteem, and therefore more like a doctorate than a bachelor's degree for purposes of evaluation of program quality. I am on shaky ground, I admit, in the discussion that follows, because of the important differences among master's programs--some of which, as trials for graduate school or as terminal awards within Ph.D. programs, are in fact dependent on the same faculties and resources as the Ph.D. programs.

Nevertheless, most master's programs, probably more than two-thirds of all master's degrees awarded, serve to provide students with the equivalent of a fifth year of bachelor's level work. More than three-quarters of master's degree granting institutions do not grant Ph.D.'s. The master's programs in the two types of institutions have different purposes and require different emphases in evaluations. Most of the 700(+) colleges and universities that grant master's degrees know, before one piece of data is gathered, that in relative terms they are not among the top schools or programs, and cannot aspire to greatness. Their faculties may be dedicated and capable, and teach mainly undergraduates, but are not leading scholars; their libraries may be adequate but not distinguished, and their entering master's degree students may score below 500 on the GRE's. Nevertheless, the master's programs at these non-Ph.D. granting institutions may be highly effective for the students who enroll.

The students in most master's programs, having taken liberal arts or other general programs, are in need of a year or two of study and training to gain an occupational identity and employment. Some students, who may have decided to become educated before they become useful, must take, at the master's level, courses they could have taken as juniors or seniors. Most of the nearly 350,000 master's students seek a teaching degree or basic training in business and management or social services. Some choose to obtain the degree in place of a year's work experience, and some need a certain number of "graduate" credits to indicate continued education in order to improve their salaries or statuses. Most of the students in master's programs are not advanced students. While they may be more mature and better educated generally than undergraduates, most master's degree candidates are as naive as undergraduates in their area of training. They need and receive a basic body of knowledge, often no more specialized, advanced, or scholarly than the senior year is over the junior year.

The similarity of most master's programs with undergraduate education has been discussed before (Berelson, 1960; Carmichael, 1965) and in several conference papers. The point for this summary is to emphasize that differences in programs in diverse settings and for different fields require different emphases in evaluation. It is obvious that comparisons of faculties, facilities and resources of most master's programs with the few programs at well-endowed, research oriented, Ph.D.-granting institutions are predictable and meaningless at all but the most general level. Programs in a non-Ph.D.-granting institution should be evaluated on the basis of the success in providing basic training in marketable skills to their students and not on their success in establishing academic scholars. If standardized measures are selected for comparative evaluation, they are useful only within institutions across programs or across well-defined types of institutions and programs.

Universities will (and should) continue to monitor their resources and the productivity of their faculties and strive to improve them. But to escape unmerited label of relative mediocrity and to accurately evaluate the benefits of the master's degree, most master's programs must go beyond measures of department and university conditions and entering students' test scores to assess the success of their programs. Multiple measurement models for institutional conditions and effects on students of different master's environments need to be explored and tested for quality assessments.

Ratings or Effects Studies. There are two traditional research areas that can guide assessments of the quality of master's programs. The first is the prestige rating game, operating to rank Ph.D. programs so that students will be able to exercise informed choice about the prospects for graduate study and so that

universities will know the relative merits of their many departments. The second research tradition is college (or school) effects studies, which evaluate undergraduate programs to see what, if anything, happens to students, in the short or long term, because of their college experiences. These studies compare students in or out of college, in different major fields, in different geographic regions, in colleges of different sizes, with different prestige or quality ratings, or with different teaching styles.

The rating game is not limited to Ph.D. programs. Ratings of undergraduate programs exist, sometimes based on the average SAT scores of entering students, and sometimes based on more elaborate systems (Pavalko and Ulrich, 1970). There are also general evaluations of undergraduate programs for consumers (e.g. Cass and Birnbaum, 1972) to assist high school students in selecting a college. It is suggested in the brief discussion above that for internal and relative assessments, for programs in non-Ph.D.-granting institutions, and for programs concerned about students, the ratings, rankings, and tallies will not ensure quality assessments. (Also see Bess, 1971 and Snell, 1965.)

Effects studies are not limited to undergraduate programs. A few studies of graduate education exist that compare income, occupation, and productivity at different levels of education. (See different treatments of undergraduate and graduate education in Adkins, 1975; Bowen, 1977; Clemente and Weber, 1973; Gottfredson, 1977; Jencks, 1972; Sewell and Hauser, 1976; Wallace, 1966; Withey, 1971 and others.) However, there are very few examples (with the exception of several conference papers) of effects studies to assess the quality of master's programs.

The concentration on ratings or rankings for Ph.D. programs and on effects studies of undergraduate education is striking and informative for the current considerations on how to assess quality of master's programs, and the quality and usefulness of the assessments. Those who consider the master's programs more like Ph.D. programs may emphasize assessments that rate or rank order the faculties and facilities of departments. Those who consider the master's programs an extension of undergraduate training may emphasize effects studies for informative assessments. It must be acknowledged that effects studies require measures of institutional (department and program) characteristics and processes as well as student background and family characteristics, histories and outcomes. This is a more demanding assessment model than one based on the prestige ratings or tallies of institutional resources. Both types of assessments should be conducted, but quality assessments of master's programs will emphasize the study of effects on students. The two types of studies can be combined in comparative evaluations where ratings or rankings of programs are used as mediating variables in effects models.

Research on effects on students of master's degree programs can be assisted by the literature of college effects research. Over the past decade this research has become increasingly sophisticated, theoretically and methodologically. Errors in early work on school or college effects were due to limited theoretical models, limited statistical methods and limited outcome measures. Researchers now realize there are outcomes as or more important than standardized test scores for the evaluation of educational and occupational effects of schooling; that the use of a single research method (such as case studies or survey research alone) restricts the insights, questions, and evaluations; and that effects models should include measures of student abilities, family conditions and processes, and former school experiences. Evaluations of master's degree program effects do not have to start from scratch to evolve adequate evaluation models, but can

adopt and improve upon models suggested by a history of college effects research.

Effects studies are most appropriate if, for internal or comparative assessments, department administrators and faculty members are interested in answers to questions such as: How do students who earn a master's degree compare with students with a bachelor's degree in terms of occupation, income, prestige and other attitudes, behaviors and outlooks? Which graduates of master's programs do better than others? Controlling on student characteristics and previous educational experiences, how do graduates of differently ranked master's programs do on a number of student outcomes? Similar questions may be raised that compare subject areas within and across departments and universities.

The issues discussed in this paper are interrelated. The master's degree, for the most part, is a necessary but not prestigious degree. Most often the degree is terminal--there are more than ten times as many master's degrees as Ph.D.'s awarded annually. Assessments should be based on what the programs aim to do for the students and how well they fulfill their goals. This requires an emphasis on student outcomes as well as the monitoring of program facilities and institutional resources. From the conference papers it is apparent that the field is ready to give serious attention to the quality of the assessments of the quality of the programs.

References

Adkins, Douglas L. The Great American Degree Machine: An Economic Analyses of the Human Resources of Higher Education. Berkeley: The Carnegie Commission on Higher Education, 1975.

Berelson, Bernard. Graduate Education in the United States. New York: McGraw-Hill, 1960.

Bess, James L. Ranking academic departments: Some cautions and recommendations. Journal of Higher Education, 1971, 42, 721-727.

Bowen, Howard R. Investment in Learning: The Individual and Social Value of American Higher Education. California: Jossey-Bass, 1977.

Carmichael, Oliver C. Graduate Education: A Critique and a Program. New York: Harper and Brothers, 1961.

Cass, James and Birnbaum, Max. Comparative Guide to American Colleges. New York: Harper and Row, 1972.

Clemente, Frank and Webb, Stephen D. Does the master's make a difference? The American Sociologist, 1973, 8, 131-134.

Gottfredson, Linda. Differential educational payoff models and theories of the diversity of human talents. Paper presented at AERA 1977 and summarized in Report 234. The Johns Hopkins University Center for Social Organization of Schools, 1977.

Jencks, Christopher, et. al. Inequality: A Reassessment of the Effect of Family and Schooling in America. New York: Basic Books, 1972.

National Council for Accreditation of Teacher Education. Standards for Accreditation of Teacher Education. Washington, D.C.: NCATE, 1977.

Pavalko, R. M. and Ulrich, A.E. Factors related to quality of schools attended by teachers. The Journal of Teacher Education, 1970, 21, 498-503.

Sewell, William H. and Hauser, Robert M. Causes and consequences of higher education: Models of the status attainment process. Pp. 9-27 in W.H. Sewell, R.M. Hauser, and D.L. Featherman, (Eds.) Schooling and Achievement in American Society. New York: Academic Press, 1976.

Snell, John L. The master's degree. Pp. 74-101 in E. Walters (Ed.), Graduate Education Today. Washington: American Council on Education, 1965.

The Chronicle of Higher Education. 1,968 new graduate programs in 6 years survey shows. The Chronicle, 1977, 15, November 7, 12.

Wallace, Walter L. Student Culture: Social Structure and Continuity in a Liberal Arts College. Chicago: Aldine, 1966.

Walters, Everett. The use of graduate education. Pp. 1-29 in E. Walters (Ed.), Graduate Education Today. Washington, D.C.: American Council on Education, 1965.

Withey, Stephen B. A Degree and What Else? Correlates and Consequences of a College Education. New York: McGraw-Hill, 1971.

WHAT DOES THE FUTURE HOLD?

Donald A. Hankin and Milton A. Grodsky
University of Maryland University College

In this presentation we approach the topic of quality assessment in the future of master's programs by separating the discussion into three overlapping and sequentially dependent sections with somewhat different emphases. The first section will review several societal trends that may have significant implications for education in general in the years to come. The second section will focus more specifically on post-baccalaureate education and the appropriate roles, functions, and formats for master's programs in particular. The third section will then address several important quality assessment issues, relative to these educational needs and programs, that may not have received the attention they deserve.

We begin by examining two societal trends that are likely to continue into the foreseeable future and have substantial educational impact. The first is the growing disjunction between the career aspirations and educational attainments of younger workers and the availability of jobs that meet their needs and skills. In other words, while professional, technical and administrative jobs are among the fastest growing occupational categories in our economy and will continue to grow for some time, the number of individuals who desire these jobs and pursue college degrees to meet their educational prerequisites will exceed the number of jobs available in these occupations (Carey, 1976; Levine, 1976). As a result, there will be increased competition for the most attractive jobs, and many college graduates will have to accept work that provides less challenge, freedom, opportunity for promotion, status, and pay than they may have expected or desired. Even those individuals who do acquire jobs commensurate with their expectations, knowledge and skills will find it difficult to advance up the career ladder traditionally associated with these jobs because of growing competition with their peers for the

meager "room at the top", made even smaller by reduced organizational growth and the elimination of mandatory retirement.

Prospects at the other end of the occupational scale are just as discouraging. Many of the jobs at this end--e.g., hospital orderly, janitor, or restaurant employee--are also among the fastest growing occupational categories in our economy, but are typically less attractive and satisfying than their professional/administrative/technical counterparts. In addition, opportunities for advancement and career progression, regardless of the level of competition for these positions, are even more limited. As O'Toole (1975) notes in his book, Work, Learning and the American Future, hospital orderlies do not progress up a career ladder to become nurses, and hotel chambermaids seldom advance to desk clerk.

Jobs at the intermediate levels of the occupational scale, including such emerging paraprofessional positions as teacher's aides and X-ray technicians, as well as many jobs in the delivery of health services, also offer little opportunity for career advancement. Taking another example from O'Toole, "X-ray technicians do not progress up a ladder and become radiologists" (1975, p. 32). In the few cases where advancement into professional positions is theoretically possible, increased competition with more highly educated workers would push these traditionally available opportunities out of the reach of a growing number of ambitious and talented individuals.

In conclusion, the overall picture suggested by these projections indicates severely restricted opportunity for upward career mobility, thwarted expectations, mounting job dissatisfaction, and the social and personal costs that might develop as a result, not to mention the increased waste of human potential at a time of unprecedented need for its utilization. All of this could lead to a particularly difficult situation for women and minorities whose previously modest career expectations have been heightened in recent years by equal employment

legislation, liberation movements, and media coverage of their newly raised consciousness.

The second trend to be discussed is the impact of technological change on the nature of work and work organizations. Further applications of new and existing technologies in the design of work processes will alter the knowledge and skill requirements and the social and organizational context of many jobs. In addition, some jobs will no doubt be eliminated and new ones created. Although the short-term nature of these changes can often be reasonably forecast, more detailed, longer-range estimations of such variables as future supply of particular occupations and their specific skill requirements are dependent upon so many other frequently unknown or poorly defined factors as to represent little more than an exercise in futility (e.g., see Pascal, Bell, Dougharty, Dunn and Thompson, 1975).

These two trends, in combination, strongly suggest that the function of undergraduate education should not be to prepare individuals for particular careers or to develop work skills and knowledge that may very well be obsolete and non-transferable in later life. A more appropriate objective would be the laying down of a basic foundation upon which successive layers of professional specialization could be built as needed. Once this foundation has been established, it would then be necessary to provide these individuals with the opportunity to acquire specific work skills, and in their later years as working adults, to upgrade their skills in the face of technologically, organizationally, and socially-induced job changes. Access to educational programs for developing the skills and knowledge needed to switch into new careers will also become increasingly important for those who have essentially reached the limits of advancement in their present careers.

What does all of this mean for graduate education and master's programs in particular? First, because a growing percentage of the population will already

have undergraduate degrees, we can expect to see a growing pool of prospective graduate students in the coming years. In addition, the widespread adoption of the educational objectives just discussed--that is, a general undergraduate education emphasizing fundamentals with the acquisition of specific professional skills reserved for post-graduate programs--would naturally lead to a pronounced shift toward graduate education.

Furthermore, the skill and educational requirements of many professional jobs will no doubt increase in response to technological, organizational and social change. Inflation will also influence these job requirements, just as it appears to influence most everything else. In this case, we are speaking of the inflation of job requirements due to the increased availability of higher level skills and education in the work force, independent of actual changes in the demands of the jobs themselves. Regardless of the source of the heightened job requirements, many individuals will find it necessary to acquire further education, training, or some certification of advanced skills--for example, via a master's degree--in order to at least maintain a competitive position in an increasingly tight professional job market.

Finally, the gradual aging of the baby boom generation could augment the trend toward graduate education as well as alter the general characteristics of the typical student in these programs, away from the relatively young, full-time graduate students who have recently attained their bachelor's degree to the older, employed or recently retired, part-time students whose undergraduate years may be far behind them.

In addition to increasing the need and demand for graduate education, the trends reviewed in this presentation could also alter the nature of graduate programs themselves. Specifically, we are likely to see a greater diversity of post-graduate offerings that take a non-traditional, interdisciplinary approach to the development of the new kinds of generally applicable job skills and

competencies appropriate to the emerging post-industrial age. Programs in policy science and analysis, program evaluation and research, and general administration are some examples that come immediately to mind. A model that seems particularly fitting for this purpose is to use the master's degree program, or a substantial portion thereof, for developing a core of general professional skills that could then be supplemented by a more highly specialized and limited concentration of courses and/or other educational experiences (e.g. an internship or guided self-study program). As individuals in their jobs find that they need new skills, they could acquire them via additional concentrations in somewhat less time than would be needed to pursue an additional master's degree. In effect, what we are talking about is establishing a core, a basic foundation of generalizeable skills, that could be supplemented by specialized, complementary, career-oriented modules or packages of coordinated courses and other experiences. These modules could then be integrated and sequenced to create individualized combinations of competencies to meet changing job requirements and new career directions.

At this point, we must express some disagreement with Dean Clark's comments at the conclusion of his presentation yesterday morning. We do not think graduate schools should be training IBM repairmen and Army gunners and radar operators; we assume Dean Clark does not think so either and was only using these examples to make an important, if arguable, point. The basic issue underlying his comments, we believe, is the question of just how job specific and specialized should the objectives of our professional masters level programs be? One of the reasons why IBM and the military are so successful in skill training is that they are principally concerned with meeting the needs of their particular organizations. But this kind of training is not designed to increase the flexibility and job context and career options of the learner. Indeed, if it were, training program graduates might leave the organization for other employers before the organization had a chance to reap the benefits of their own programs. In effect, the objectives of

The organization are inconsistent with the long-term career objectives of the trainee, and I believe we should be more concerned with serving the latter than the former.

In any case, there is no reason why goals of employers, students, and educational institutions cannot be matched. For example, co-op, internship, part-time, and off-campus programs could provide the kind of employer-specific job experience that would complement the specialized university-based career modules described earlier.

In fact, more widespread use of non-traditional delivery systems in general are also a likely result of the societal trends reviewed here. Easier access to quality graduate programs by working adults is a growing need to which many schools have already begun to respond by increasing the number of evening, part-time, and off-campus programs. In addition, the rising price of energy--and, therefore, the costs of travel--coupled with continued advances in telecommunications technology should spur the utilization of this technology to facilitate off-campus offerings and even bring appropriate portions of some programs directly into the home, as is done in Open University programs, or into the workplace, perhaps to facilitate the university-employer linkages just described. (However, since much of this technology and its applications are new, unique, and largely untested, particular care must be taken to assure that the knowledge and skill bases presented with this media option are of significant quality.) Finally, the apparent inclination and desire of many adults to pursue self-planned learning--about 70-80% of them do so, according to some recent estimates (Tough, 1978)--suggests yet another potential role for graduate education; that is, in producing learning materials for self-planned instruction, providing access to resources and counselling, and, perhaps, most important, difficult and surely most relevant to this conference, assessing quality of student performance.

With this last comment, we make the transition to the last section of this presentation, the implications of these potential social and educational trends for

the assessment of quality. We will begin by addressing the issue just discussed, alterations of traditional delivery systems and formats to provide working adults with greater access to graduate education. While Drs. Andrews, Hagerty, Paulat and Welch and an occasional comment by other speakers and questions from the audience have dealt to some degree with assessment issues in part-time and off-campus programs, we do not remember hearing anyone speak to the issues of remote delivery telecommunications-based systems, or experiential and self-planned learning. Maybe by not dealing with these issues, we hope that they will go away, since, as many of us have learned from experiential learning programs, they can present particularly dicey credentialing problems. But I am afraid that these programs will proliferate in any case, and if we do not get involved in some way, we will continue to hear academic horror stories from conference panelists, academicians responsible for administering these programs, and, God forbid, the commentators on CBS's "60 Minutes"!

Another set of issues that has only been mentioned in passing during this conference are the quality assessment problems that may arise from student populations substantially more heterogeneous than those with which we are accustomed to dealing. Diversity in educational and cultural background, age, and work experience, to mention just a handful of the potentially relevant variables, could complicate even further the assessment dimensions that are influenced by student characteristics. As Dr. Armstrong indicated in his presentation, foreign students, at least in engineering, are beginning to make up an increasingly large proportion of our graduate population. For example, most of us in the last few years have probably had some Iranian students in our classrooms, and the recent vanguard of students from the Peoples Republic of China are just the first wave of a potentially huge influx of citizens from that country seeking advanced technical and administrative skills. The language problems alone could turn an already difficult task into a nightmare.

One issue arising from our review of contemporary social trends that has attracted a considerable degree of attention in this conference, and one that deserves repeated emphasis, is the more explicit linking of graduate education with the needs of the economy and society. As Rosabeth Moss Kanter notes in a recent paper for the American Association of Higher Education, the growing competition for high-paying, high-prestige, and meaningful jobs will create more pressure for credentials and, possibly, "more disenchantment with schools and universities for no longer guaranteeing immediate access to desirable work and for substituting the manufacture of credentials for educational substance" (1978, pp. 5). A reoccurring theme throughout this conference has been the spread of consumerism to higher education; if we do not meet this challenge the prognosis for the master's degree will be no better than the ominous state of affairs described by our speakers from the business community, Drs. Armstrong and Townsend. Identifying the evolving skill needs of the post-industrial society and developing the criteria for assessing competency in these increasingly abstract and hard-to-define skills might very well be the most difficult, important and challenging task facing higher education in the years to come.

Related to the above and clearly evident in the deliberations of the conference is the lack of specific methodologies to evaluate master's level programs. We have not made our "peace" with the many traditional statistical and evaluation problems which plague the scientist/scholar investigating a new domain. Thus, it appears that we have ignored these problems and appealed primarily to the authority of the academic community in determining the quality of a master's program. Though library collection, number of faculty holding terminal degrees, refereed journal articles, GRE scores, etc. are perhaps indicators of quality, these criteria also reflect the extant conditions of the academic community. Therefore, they may be parochial indicators and reflect a resistance to change in both format and purpose of graduate education. This may be particularly true at the master's level.

What is needed is a joint concerted effort by the academic and user community to develop curricular paradigms which are amenable to assessment and evaluation. Such "knotty" areas as the criterion problem must be attacked with vigor if we wish master's level education to be viable. One approach might be to view the master's level degree program as a professional intervention to change student behavior and, therefore, one may develop a methodology which will allow for controlled evaluation of such intervention outcomes.

In light of the concern and thoughtful deliberations reflected throughout this conference, it is clear that the problems of assessment are difficult but not insurmountable and what is required is a programmatic approach. Therefore, it is most appropriate to close this conference on a note of optimism that the proceedings of the last few days have led to a clearer understanding of the problems and perhaps germinated possible strategies for their solution.

REFERENCES

Carey, M.L. Revised occupational projections to 1985. Monthly Labor Review, 1976, 99(11), 10-22.

Kanter, R.M. The Changing Shape of Work: Psychological Trends in America. In Current Issues in Higher Education. Washington, D.C.: American Association for Higher Education, 1978, 1-8.

Levine, C.G. Occupational outlook handbook in brief: 1976-77 edition. Occupational Outlook Quarterly, 1976, 20(1), 2-27.

O'Toole, J. The reserve army of the underemployed: I-The world of work. Change, May 1975, 26-33;63.

Pascal, A.H., D. Bell, L.A. Dougherty, M.L. Dunn, and V.M. Thompson. An evaluation of policy related research on programs for mid-life career redirection: Major findings (Vol. 2). (R-1584/2-HEW). Santa Monica, Ca.: Rand Corporation, February, 1975.

Tough, A. Major Learning Efforts: Recent Research and Future Directions. Journal of Adult Education, 1978, 28(4), 250-263.

THE COUNCIL OF GRADUATE SCHOOLS IN THE UNITED STATES

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October 10, 1978

Dear Graduate Dean:

Last spring CGS appointed an ad hoc Task Force on the Assessment of Quality in Master's Degree Programs. The charge to the Task Force was to evaluate the results of the recently completed research project "Assessing Dimensions of Quality in Doctoral Education" relative to the program review needs of master's degree programs, to consider whether the same "indicators of quality" are appropriate for master's as for doctor's degree programs, and to suggest changes of content or emphasis that should be considered for the review of academic, professional, or technical master's degree programs.

The Task Force, under the chairmanship of Dean Barnard Downey of Villanova University, has met several times to review the salient characteristics of the several different types of master's degree programs and to evaluate possible indicators of these program characteristics. Members of the Task Force, in addition to Dean Downey, are James Ballowe (Bradley University), Giles Brown (California State at Fullerton), Laurine Fitzgerald (University of Wisconsin at Oshkosh), and Robert Rayno (N.Y.U.); Ben Webb of Georgia Tech contributed significantly to the work of the group prior to his untimely death in late August. The efforts of the Task Force have been assisted by Mary Jo Clark and Robert Altman of Educational Testing Service.

The Task Force has concluded that the overall quality of a master's degree program is determined in large part by the quality of the program in six areas--faculty training and involvement, student ability and involvement, available resources, the learning environment, the program's contents and procedures, and outcomes as represented by the activities of graduates. Based on these areas, the accompanying materials list several program characteristics that might be important to know about when making judgments about quality, and suggest some specific indicators and sources of indicators for each characteristic.

The Task Force now needs the assistance of the CGS membership in evaluating its work and recommending next steps for the consideration of

the Council. Enclosed with this letter are two documents: the first is the list of program characteristics, indicators, and sources developed by the Task Force; the second is a rating form which asks for your judgments about the importance of the characteristics and the appropriateness of the indicators in the assessment of master's degree programs. Please send your responses to Dean Downey no later than November 6, 1978. The Task Force plans to tabulate the results in time to prepare a report and recommendations for the CGS Annual Meeting Nov. 29-Dec. 1, in San Diego.

Thank you for your thoughtful assistance to this project.

Sincerely,

Michael J. Pelczar, Jr.
President

Enclosures

Dean's Rating Form

Information for Program Assessment--Master's Degree Level
October, 1978

Your opinions about the best ways to review master's degree programs (as distinct from doctoral or baccalaureate degree programs) are requested on the attached sheets. Two questions are posed:

I. (a) How important is each listed characteristic when reviewing academic master's degree programs (e.g., traditional MA/MS degree programs)?

(b) How important is each listed characteristic when reviewing professional or technical master's degree programs (e.g., master's programs in business, engineering, or social work)?

II. Are the suggested indicators and sources of information (which will be found in accompanying materials) appropriate as measures of the listed program characteristics? Are there other indicators that would be useful when reviewing master's degree programs?

Please answer the questions by circling one number on each line; write in comments at the bottom of each page. Try to focus your responses on the assessment of stand-alone master's degree programs, or master's degree programs within departments that offer the doctorate that should be evaluated separately from the doctoral program. Assume the primary purpose of the program review is for self-study, improvement of the program, and planning within the university.

Accompanying materials suggest specific indicators for each listed program characteristic, and possible sources of the suggested data; refer to these materials especially when answering question II. Note also that the last page of the accompanying materials lists a variety of information programs may wish to collect as part of program review, in addition to the specific indicators and sources covered by the rating form.

Results of this survey will be reported to CGS members at the Annual Meeting in San Diego in early December. Please return your completed rating form and comments by November 6, 1978 to Dr. Bernard J. Downey, Dean of the Graduate School, Villanova University, Villanova, PA 19085.

Name of respondent: _____ University: _____

Which statement better describes your institution?

Master's degree granting (only or primarily) ☐

Research oriented - Doctoral degree granting ☐

If your responses concerning academic or professional/technical master's degree programs are limited to certain fields (e.g., only the sciences in "academic," or only engineering in "professional/technical"), write in the fields that are covered by your judgments:

Academic _____ Professional/Technical _____

Dean's Rating Form
Information for Program Assessment--Master's Degree Level

Program Area	Characteristics	Program Type	I: Importance of information about this characteristic in the assessment of quality in (a) academic and (b) professional or technical master's programs (circle one number on each line)				II: Adequacy of suggested indicators and sources (see separate sheet; circle one number on each line)			
			Essential	Important	Perhaps useful	Not important	Very good	Good	Poor but useable	Not useable
A. Faculty	1. Quality of instruction	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	2. Quality of student advisement	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	3. Scholarly and artistic contributions	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	4. Professional activities	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	5. Commitment to the program	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	6. Training and experience	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1

Suggestions for additional program characteristics that should be assessed:

Specific suggested indicators that should be omitted or added (see suggested indicators on separate pages; identify suggestions with characteristics by number):

Dean's Rating Form
Information for Program Assessment--Master's Degree Level

Program Area	Characteristics	Program Type	I: Importance of information about this characteristic in the assessment of quality in (a) academic and (b) professional or technical master's programs (circle one number on each line)				II: Adequacy of suggested indicators and sources (see separate sheet; circle one number on each line)			
			Essential	Important	Perhaps useful	Not important	Very good	Good	Poor but useable	Not useable
B. Students	1. Academic ability	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	2. Accomplishments	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	3. Commitment and motivation	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	4. Plans after graduation	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	5. Personal characteristics	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	6. Persistence/attrition	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1

Suggestions for additional program characteristics that should be assessed:

Specific suggested indicators that should be omitted or added (see suggested indicators on separate pages; identify suggestions with characteristics by number):

Program Area	Characteristics	Program Type	I: Importance of information about this characteristic in the assessment of quality in (a) academic and (b) professional or technical master's programs (circle one number on each line)				II: Adequacy of suggested indicators and sources (see separate sheet; circle one number on each line)			
			Essential	Important	Perhaps useful	Not important	Very good	Good	Poor but useable	Not useable
C. Resources	1. Facilities and services	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	2. Administrative support	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	3. Support services for students	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	4. Faculty	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	5. Enrollment	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	6. Degrees	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1

Suggestions for additional program characteristics that should be assessed:

Specific suggested indicators that should be omitted or added (see suggested indicators on separate pages; identify suggestions with characteristics by number):

Program Area	Characteristics	Program Type	I: Importance of information about this characteristic in the assessment of quality in (a) academic and (b) professional or technical master's programs (circle one number on each line)				II: Adequacy of suggested indicators and sources (see separate sheet; circle one number on each line)			
			Essential	Important	Perhaps useful	Not important	Very good	Good	Poor but useable	Not useable
D. Learning Environment	1. Intellectual environment	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	2. Interpersonal environment	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	3. Morale									
	a. student satisfaction with program	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	b. faculty satisfaction with employment conditions	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1

Suggestions for additional program characteristics that should be assessed:

Specific suggested indicators that should be omitted or added (see suggested indicators on separate pages; identify suggestions with characteristics by number):

Program Area	Characteristics	Program Type	I: Importance of information about this characteristic in the assessment of quality in (a) academic and (b) professional or technical master's programs (circle one number on each line)				II: Adequacy of suggested indicators and sources (see separate sheet; circle one number on each line)			
			Essential	Important	Perhaps useful	Not important	Very good	Good	Poor but useable	Not useable
E. Program Contents and Procedures	1. Program purpose	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	2. Academic offerings	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	3. Degree Requirements	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	4. Assistantship and internship experiences	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1

Suggestions for additional program characteristics that should be assessed:

Specific suggested indicators that should be omitted or added (see suggested indicators on separate pages; identify suggestions with characteristics by number):

Program Area	Characteristics	Program Type	I: Importance of information about this characteristic in the assessment of quality in (a) academic and (b) professional or technical master's programs (circle one number on each line)				II: Adequacy of suggested indicators and sources (see separate sheet; circle one number on each line)			
			Essential	Important	Perhaps useful	Not important	Very good	Good	Poor but useable	Not useable
F. Recent alumni	1. First job after degree	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	2. Career development	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	3. Post-degree achievements	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	4. Satisfaction with educational training	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1
	5. Time to degree	Acad	4	3	2	1	4	3	2	1
		Pro/Tech	4	3	2	1	4	3	2	1

Suggestions for additional program characteristics that should be assessed:

Specific suggested indicators that should be omitted or added (see suggested indicators on separate pages; identify suggestions with characteristics by number):

G. This space is for comments you would like to make concerning the list of additional kinds of information departments might collect as part of program review (last page of accompanying materials)--suggestions for addition or deletion? Importance of these data relative to survey data from program faculty members, graduate students, and alumni? Importance of developing ways in which these data might be collected uniformly across departments in the same field in different universities?

H. In your opinion, would program assessment instruments like the ones suggested in these materials (e.g., self-report and rating questionnaires completed by faculty members, graduate students, and recent alumni) be useful in the review and evaluation of master's degree programs at your university?

Approx. % in your univ.	Type of program	Likely usefulness of assessment instruments
	1. Stand-alone master's degree programs	
_____	a) academic fields	_____
_____	b) professional/technical fields	_____
	2. Master's degree programs in departments offering the doctorate	
_____	a) academic fields	_____
_____	b) professional/technical fields	_____

I. Are there certain types of graduate programs for which you think such materials would definitely not be appropriate? If so, please comment.

J. Any other comments you would like to make about the assessment of master's degree programs or about this survey.

Information for Program Assessment --Masters Degree Level
Council of Graduate Schools Survey
October 1978

Information About	Characteristics	Suggested Indicators	Sources of Indicators
A. Faculty	1. Quality of instruction	Ratings of faculty preparation for courses, useful criticism of student work, use of appropriate teaching methods and evaluation procedures, excitement for new ideas, helpfulness to students.	Student questionnaire Alumni questionnaire
	2. Quality of student advisement	Ratings of faculty awareness of student needs and suggestions, concern for the professional development of students, accessibility; quality of academic and career guidance.	Student questionnaire Alumni questionnaire Faculty questionnaire
	3. Scholarly and artistic contributions	a) number of scholarly or scientific books and journal articles published in the last five years b) number of other creative scholarly works that have been performed, exhibited, or published in the last five years. c) Research activity as indicated by grants, editorships, awards, etc.	Faculty questionnaire
	4. Professional activities	Self-reported offices held in professional associations; consulting; contributed services; private practice of one's profession (e.g., clinician or CPA)	Faculty questionnaire
	5. Commitment to the program	Ratings of involvement in decision-making; team efforts; job satisfaction; commitment to the master's degree program.	Faculty questionnaire
	6. Training and experience	Highest degree; years of teaching experience; rank; tenure.	Faculty questionnaire

Information About	Characteristics	Suggested Indicators	Sources of Indicators
B. Students	1. Academic ability	Self-reported grades: (a) total undergraduate; (b) major and/or allied undergraduate; (c) graduate	Student questionnaire
	2. Accomplishments	Self-reported publications or presentations, independent research, nonclassroom development of professional skills	Student questionnaire
	3. Commitment and motivation	a) Self-rated pursuit of unassigned reading, enthusiasm for or dedication to the major; professional activities	Student questionnaire
		b) Faculty-rated enthusiasm, perseverance, and independence of students.	Faculty questionnaire
	4. Plans after graduation	Self-reported plans for further study or employment	Student questionnaire
	5. Personal characteristics	Year of undergraduate degree, sex, enrollment full- or part-time, relevant work experience	Student questionnaire
	6. Persistence/attrition	Percentage of entering students who complete the degree	Program profile
C. Resources	1. Facilities and services	Ratings of adequacy of library holdings, equipment needed for teaching and research, space, course scheduling; departmental funds; financial aid for students.	Faculty questionnaire Student questionnaire
	2. Administrative support	Ratings of campus administration and dean's support of the program; university procedures relative to program development; adequacy of support staff	Faculty questionnaire
	3. Support services for students	Ratings of accessibility of graduate student housing, counseling, financial aid, health care, placement, parking, facilities for intellectual and social interaction	Student questionnaire
	4. Faculty	Percentage of faculty with doctorates; percentage tenured; number of full-time and part-time faculty.	Program profile

(continued)

Information About	Characteristics	Suggested Indicators	Sources of Indicators
C. Resources (cont'd.)	5. Enrollment	Number of first-year students; total number of full- and part-time students; number of foreign students	Program profile
	6. Degrees	Highest degree offered; number of master's and doctor's degrees awarded in last five years	Program profile
D. Learning Environment	1. Intellectual environment	Ratings of competitiveness among students, atmosphere conducive to rigorous intellectual effort, intellectual excitement, academic demands; opportunity to interact with persons employed in fields related to the degree program	Student questionnaire Faculty questionnaire
	2. Interpersonal environment	Ratings of extent to which different personalities and points of view are welcome; team efforts; informal student and faculty interactions; faculty concern for student development; collegiality	Student questionnaire Faculty questionnaire
	3. Morale a. student satisfaction with program	Ratings of training as preparation for anticipated career; learning that has taken place; extent to which program delivers what was promised	Student questionnaire
	b. faculty satisfaction with employment conditions	Ratings of departmental leadership, participation in decision-making, interactions with colleagues	Faculty questionnaire
E. Program Contents and Procedures	1. Program purpose	Ratings of relative emphasis on preparing researchers, teachers, or practitioners; personal enrichment; or further study	Faculty questionnaire Student questionnaire
	2. Academic offerings	Ratings of opportunities to take courses in other fields, number and quality of non-course activities sponsored by the program, variety and depth of course offerings, flexibility to meet individual student needs, independent study; opportunities for creativity in projects, papers, or research; extent to which course offerings and content reflect clearly stated objectives of the program	Student questionnaire Faculty questionnaire Alumni questionnaire

(continued)

Aspect	Characteristics	Suggested Indicators	Source of Indicator
E. Program Contents and Procedures (cont'd.)	3. Degree requirements	Does the degree require: a) comprehensive or other terminal examination b) thesis or other independent research project c) internship, practicum, or field experience	Program profile
	4. Assistantship and internship experiences	Ratings of assignment, supervision, colleagueship; learning experiences	Student questionnaire Alumni questionnaire
F. Recent alumni	1. First job after degree	Self-reported employer type, major job responsibilities, relationship to graduate study, whether job was the same as or different from one held prior to receiving the degree	Alumni questionnaire
	2. Career development	Self-reported current employer type, major job responsibilities, relationship to graduate study, satisfaction with career progression, supervisory responsibilities	Alumni questionnaire
	3. Post-degree achievements	Self-reported professional publications and presentations, income, noteworthy achievements, further graduate study	Alumni questionnaire
	4. Satisfaction with educational training	Ratings of extent to which program prepared for employment; personal enrichment; strengths and weaknesses of program	Alumni questionnaire
	5. Time to degree	Year started program, year received degree	Alumni questionnaire

Additional Information Programs May Wish to Collect as Part of Program Assessment

Deans and departments may also wish to consider the following kinds of information when reviewing graduate programs. However, they are difficult to collect in exactly the same way from a large number of programs because of the different ways in which records are kept, or different ways of defining some of the variables. Therefore, they are suggested as additional things a graduate program should know about itself, and should consider along with questionnaire results from faculty members, graduate students, and recent alumni.

1. History of the program--when degrees were first awarded, significant changes in the purposes or structure in the last few years, pattern of enrollments and degrees granted in the last ten years, current primary purpose.

2. Interinstitutional or other cooperative arrangements.

3. Student recruitment and retention

   a. Appropriateness of recruiting procedures and literature from the perspective of the prospective student or consumer.

   b. By calendar year, number of students who applied, were offered admission, enrolled with financial aid, and enrolled without financial aid.

   c. Average undergraduate grade-point average of entering students; average admissions test scores of entering students; average overall and major grades in graduate school.

   d. By entering class, number of students who persist to the degree, timing and reasons for dropping out, length of time required to complete the degree; interviews with persons leaving and completing the program.

4. Faculty teaching load; use of adjunct faculty; recruitment, promotion, and retention policies.

5. Mix of lecture/seminar/practicum courses, with average size of each type.

6. Program content: depth and breadth of courses offered, expected sequence of courses, procedures for introducing or eliminating courses, nonclassroom academic offerings; coherence.

7. Evaluation procedures: critical review of the quality of comprehensive examinations, independent research projects, theses, internships or work-study experiences; value-added measures of student knowledge and skills.

8. Degree requirements: appropriateness of requirements, fairness in administering them, procedures to change them.

9. Departmental budgetary support: internal, external, research, student financial aid, faculty salary levels.

10. Current and projected employment demand for graduates; kinds of jobs taken by recent graduates.

Report
on the
Survey of Proposed Characteristics, Indicators, and Sources
Related to the Assessment of Quality in Master's Degree Programs
By
CGS Task Force on Assessment of Quality in Master's Degree Programs

James Ballowe, Bradley University
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January 10, 1979

RESPONSE

QUESTIONNAIRES SENT OUT	363
QUESTIONNAIRES RETURNED (January 3, 1979)	202

Institution Type	Master's only - or predominantly	86
	Research oriented Ph.D.	118
		202

EXPECTATIONS OF USEFULNESS

	Master's	Doctors	Total	%	Adjusted %
Very useful	19	23	42	20.8%	26.1%
Useful	35	47	82	40.5%	50.9%
Somewhat useful	0	18	27	13.4%	16.8%
Doubtful or of no use	3	7	10	5.0%	6.2%
Did not answer question	20	21	41	20.3%	-
TOTALS	86	116	202	100.0%	100.0%

Information for Program Assessment -- Masters Degree Level
Council of Graduate Schools Survey
Final Report - January 10, 1979

Ratings of Importance of Characteristics

PART I		Master's Institutions		Doctoral Institutions		All Institutions	
		Academic	Prof./Tech	Academic	Prof./Tech	Academic	Prof./Tech
A.	FACULTY Characteristics						
	Quality of instruction	3.90	3.88	3.77	3.82	3.83	3.85
	Quality of student advisement	3.40	3.37	3.36	3.37	3.38	3.37
	Scholarly & artistic contributions	3.39	3.05	3.68	3.16	3.55	3.11
	Professional activities	2.93	3.35	2.90	3.27	2.91	3.31
	Commitment to the program	3.65	3.59	3.50	3.56	3.56	3.57
	Training & experience	3.61	3.64	3.46	3.45	3.50	3.53
B.	STUDENTS Characteristics						
	Academic ability	3.58	3.34	3.67	3.43	3.63	3.39
	Accomplishments	2.95	2.97	3.03	3.10	2.99	3.03
	Commitment & motivation	3.52	3.31	3.50	3.45	3.51	3.39
	Plans after graduation	2.48	2.67	2.36	2.73	2.41	2.70
	Personal characteristics	2.58	2.73	2.32	2.48	2.43	2.59
	Persistence/attrition	3.04	3.03	3.10	3.12	3.06	3.08

PART I

Ratings of Importance of Characteristics

	Master's Institutions		Doctoral Institutions		All Institutions	
C. RESOURCES Characteristics	Academic	Prof./Tech	Academic	Prof./Tech	Academic	Prof./Tech
Facilities & services	3.56	3.52	3.70	3.66	3.64	3.60
Administrative support	3.44	3.46	3.39	3.35	3.41	3.40
Support services for students	2.89	2.87	2.76	2.77	2.82	2.81
Faculty	3.80	3.72	3.69	3.54	3.74	3.62
Enrollment	2.82	2.83	2.94	2.94	2.89	2.89
Degrees	3.06	2.82	2.99	2.91	3.02	2.87
D. LEARNING ENVIRONMENT Characteristics						
Intellectual environment	3.58	3.38	3.70	3.45	3.61	3.42
Interpersonal environment	3.17	3.14	3.18	3.18	3.18	3.16
Morale						
a. student satisfaction with program	3.31	3.35	3.31	3.35	3.31	3.35
b. Faculty satisfaction with employment conditions	3.22	3.26	3.18	3.11	3.20	3.15

Information for Program Assessment -- Masters Degree Level
Council of Graduate Schools Survey
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PART I

Ratings of Importance of Characteristics

	Master's Institutions		Doctoral Institutions		All Institutions	
E. PROGRAM CONTENTS & PROCEDURES Characteristics	Academic	Prof./Tech	Academic	Prof./Tech	Academic	Prof./Tech
Program purpose	3.44	3.47	3.34	3.43	3.38	3.45
Academic offerings	3.58	3.49	3.61	3.44	3.59	3.46
Degree requirements	3.51	3.47	3.65	3.61	3.59	3.55
Assistantship & Internship experiences	2.99	3.13	3.16	3.33	3.09	3.24
F. RECENT ALUMNI Characteristics						
First job after degree	2.70	2.94	2.91	3.26	2.82	3.12
Career development	2.89	3.13	2.95	3.15	2.92	3.14
Post-degree achievements	2.90	2.96	3.19	3.12	3.07	3.05
Satisfaction with educational training	3.26	3.28	3.26	3.39	3.26	3.34
Time to degree	2.45	2.42	2.58	2.62	2.52	2.57

Information for Program Assessment -- Masters Degree Level
Council of Graduate Schools Survey
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PART II

Rating of Appropriateness of Indicators and Sources

A. FACULTY Characteristics	Source of Indicators	Master's Institutions		Doctoral Institutions		All Institutions	
		Acad.	P/T	Acad.	P/T	Acad.	P/T
Quality of instruction Ratings of faculty preparation for courses, useful criticism of student work, use of appropriate teaching methods and evaluation procedures, excitement for new ideas, helpfulness to students.	S,A	3.04	3.03	2.93	2.99	2.98	3.01
Quality of student advisement Ratings of faculty awareness of student needs and suggestions, concern for the professional development of students, accessibility; quality of academic and career guidance.	S,A,F	3.05	3.12	2.95	2.97	2.99	3.04
Scholarly and artistic contributions a) number of scholarly or scientific books and journal articles published in the last five years b) number of other creative scholarly works that have been performed, exhibited, or published in the last five years c) Research activity as indicated by grants, editorships, awards, etc.	F	3.45	3.41	3.27	3.14	3.35	3.26
Professional activities Self-reported offices held in professional associations; consulting; contributed services; private practice of one's profession (e.g., clinician or CPA)	F	3.25	3.32	3.17	3.15	3.20	3.22
Commitment to the program Ratings of involvement in decision-making; team efforts; job satisfaction; commitment to the master's degree program.	F	2.80	2.82	2.61	2.59	2.69	2.70
Training & experience Highest degree; years of teaching experience; rank; tenure.	F	3.41	3.39	3.44	3.26	3.43	3.32

Information for Program Assessment -- Masters Degree Level
Council of Graduate Schools Survey
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PART II

Rating of Appropriateness of Indicators and Sources

B. STUDENTS Characteristics	Source of Indicators	Master's Institutions		Doctoral Institutions		All Institutions	
		Acad.	P/T	Acad.	P/T	Acad.	P/T
Academic ability Self-reported grades: (a) total undergraduate; (b) major and/or allied undergraduate; (c) graduate	S	2.80	2.83	2.78	2.77	2.79	2.80
Accomplishments Self-reported publications or presentations, independent research, nonclassroom development of professional skills	S	2.86	2.81	2.92	2.88	2.89	2.87
Commitment and motivation a) Self-rated pursuit of unassigned reading, enthusiasm for or dedication to the major; professional activities	S	2.79	2.77	2.71	2.76	2.74	2.77
b) Faculty-rated enthusiasm, perseverance, and independence of students.	F						
Plans after graduation Self-reported plans for further study or employment	S	2.74	2.76	2.94	2.98	2.85	2.88
Personal characteristics Year of undergraduate degree, sex, enrollment full- or part-time, relevant work experience	S	2.88	2.92	2.88	2.88	2.88	2.90
Persistence/attrition Percentage of entering students who complete the degree	P	3.32	3.28	3.28	3.32	3.30	3.30

PART II

Rating of Appropriateness of Indicators and Sources

C. RESOURCES Characteristics	Source of Indicators	Master's Institutions		Doctoral Institutions		All Institutions	
		Acad.	P/T	Acad.	P/T	Acad.	P/T
Facilities & services Ratings of adequacy of library holdings, equipment needed for teaching and research, space, course scheduling; departmental funds; financial aid for students.	F,S	3.24	3.29	3.17	3.23	3.20	3.26
Administrative support Ratings of campus administration and dean's support of the program; university procedures relative to program development; adequacy of support staff	F	2.95	2.94	2.88	2.84	2.91	2.90
Support services for students Ratings of accessibility of graduate student housing, counseling, financial aid, health care, placement, parking, facilities for intellectual and social interaction	S	3.09	3.05	2.91	2.91	2.99	2.97
Faculty Percentage of faculty with doctorates; percentage tenured; number of full-time and part-time faculty	P	3.54	3.44	3.49	3.47	3.51	3.46
Enrollment Number of first-year students; total number of full- and part-time students; number of foreign students	P	3.46	3.43	3.50	3.49	3.49	3.47
Degrees Highest degree offered; number of master's and doctor's degrees awarded in last five years.	P	3.53	3.48	3.55	3.51	3.54	3.50

Information for Program Assessment -- Masters Degree Level
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PART II

Rating of Appropriateness of Indicators and Sources

D. LEARNING ENVIRONMENT Characteristics	Source of Indicators	Master's Institutions		Doctoral Institutions		All Institutions	
		Acad.	P/T	Acad.	P/T	Acad.	P/T
Intellectual environment Ratings of competitiveness among students, atmosphere conducive to rigorous intellectual effort, intellectual excitement, academic demands; opportunity to interact with persons employed in fields related to the degree program.	S,F	3.16	3.04	3.06	3.08	3.10	3.06
Interpersonal environment Ratings of extent to which different personalities and points of view are welcome; team efforts; informal student and faculty interactions; faculty concern for student development; collegiality.	S,F	3.05	2.99	2.91	3.01	2.97	3.00
Morale							
a. Student satisfaction with program Ratings of training as preparation for anticipated career; learning that has taken place; extent to which program delivers what was promised.	S	3.11	3.10	3.10	3.11	3.10	3.11
b. Faculty satisfaction with employment conditions Ratings of departmental leadership, participation in decision-making, interactions with colleagues	F	3.07	3.03	3.02	3.03	3.04	3.03

Information for Program Assessment -- Masters Degree Level
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PART II

Rating of Appropriateness of Indicators and Sources

E. PROGRAM CONTENTS & PROCEDURES Characteristics	Source of Indicators	Master's Institutions		Doctoral Institutions		All Institutions	
		Acad.	P/T	Acad.	P/T	Acad.	P/T
Program purpose Ratings of relative emphasis on preparing researchers, teachers, or practitioners; personal enrichment; or further study.	F,S	3.11	3.13	2.96	3.01	3.02	3.06
Academic offerings Ratings of opportunities to take courses in other fields, number and quality of non-course activities sponsored by the program, variety and depth of course offerings, flexibility to meet individual student needs, independent study; opportunities for creativity in projects, papers, or research; extent to which course offerings and content reflect clearly stated objectives of the program.	S,F,A	3.32	3.31	3.21	3.24	3.26	3.27
Degree requirements Does the degree require: a) comprehensive or other terminal examination b) thesis or other independent research project c) internship, practicum, or field experience	P	3.56	3.56	3.58	3.54	3.57	3.55
Assistantship and internship experiences Ratings of assignment, supervision, collegueship, learning experiences	S,A	3.16	3.26	3.14	3.17	3.15	3.21

Information for Program Assessment -- Masters Degree Level
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PART II

Rating of Appropriateness of Indicators and Sources

F. RECENT ALUMNI Characteristics	Source of Indicators	Master's Institutions		Doctoral Institutions		All Institutions	
		Acad.	P/T	Acad.	P/T	Acad.	P/T
First job after degree Self-reported employer type, major job responsibilities, relationship to graduate study, whether job was the same as or different from one held prior to receiving the degree	A	3.15	3.19	3.26	3.35	3.22	3.28
Career development Self-reported current employer type, major job responsibilities, relationship to graduate study, satisfaction with career progression, supervisory responsibilities.	A	3.12	3.14	3.20	3.18	3.16	3.16
Post-degree achievements Self-reported professional publications and presentations, income, noteworthy achievements, further graduate study.	A	3.03	3.00	3.25	3.22	3.15	3.12
Satisfaction with educational training Ratings of extent to which program prepared for employment; personal enrichment; strengths and weakness of program.	A	3.20	3.18	3.21	3.26	3.21	3.22
Time to degree Year started program, year received degree.	A	3.04	3.01	3.12	3.21	3.09	3.13

James Ballowe
Bradley University

(These are notes on the faculty and student divi
taken of graduate deans to determine the import
indicators, and sources in the development of a
assess the quality of the master's degree. The
presentation at the Middle States/CGS Conferenc

Later at this conference, Dean Downey, the chairman o
Assessment of Quality in Master's Degree Programs, wil
and business of the Task Force. However, before I ap
progress to date on developing a quantitative instrum
of quality attained by faculty and students, I want t
experience as a member of this Task Force.

We began with a six-member team evenly balanced betwe
Considering the fact that the overwhelming majority o
administrators is from the sciences, the composition
either the desire of CGS to demythologize the absolut
establishment or the concern of CGS to provide a human
tative device. Unfortunately, our colleague Sam Webb
summer. Not replaced, the scientists were outnumbered
discounts psychometrics as a pure science, then we are
of the scientific establishment which governs most of
The only common characteristic is that our chairman is
even further that two of us are scholars in literature
universities (Bob Rando of NYU and I) and you have a co
of not being aware of the way things are. Or to parap
(an insurance company vice president and one of this c
committee may not play things the way they are. It wi
think they are. Humanistic or scientific methodologie

understands that an instrument to assess quality (i.e. the highest stand
achieved by a particular program for which there is an articulated missic
itself reflect what quality is, not be descriptive of the way things are.

The magnitude of this task overwhelms us still. We have to keep remindir
ourselves that what we are trying to develop is but a single instrument f
helping to determine program quality in post-baccalaureate master's level
tion. It is an instrument which will encourage collection of data, consul
with constituencies, articulation of mission. It cannot be relied upon a
Yet the task seemed at the start (and seems even more so now) amorphous w
look at the varieties of master's level education: the traditional MA and
the professional master's of whatever MI descriptives; the 24-30 hr. prog
to the 60+ hour programs; the "academic" as opposed to the "studio" degre
terminal programs which stand alone in relation to those which are but by
to the Ph.D., failing which they become consolation prizes and, consequen
often regarded with confused indifference or condescension by the faculty
administration. Given such a proliferation of what once was an honor off
outstanding alumni for meretorious contributions following the baccalaure
degree, one wonders whether a single instrument can be developed or used
assess quality of the master's. I think of those plastic goggles designe
blind cannabalistic chickens. The device works. But catching 1,000 chic
the hen house and applying the device is another matter. And there are
one or two chickens that reject the device and continue to glut themselve
reformed neighbors.

As Task Force members we must also realize that we are not alone in the t
From the outset we have worked with ETS and have kept in mind the Ph.D. in

oped by ETS and our follow task force. We have asked for opinions
our colleagues and received 202 responses. As this conference implies,
number of people who have thought long and hard about quality
of the master's. At last count I came up with 65 different people
the ask force members) who have prepared comments on the subject. To
y 200 people together to engage in these sessions is evidence of
y's ability as an administrator of such sessions or the felt need that
for us to address ourselves to this topic in a collective way on a
ale. I suspect it is a bit of both.

cture the Task Force is ready to ask ETS to develop a draft of a
essment instrument which will help assess the quality of the program
faculty, students, resources, the learning environment, program
d procedures, and recent alumni. I want briefly to discuss the faculty
characteristics. As I do this, keep in mind that the Task Force
inions from 200 deans on characteristics which should be considered in
ssessment instrument. The deans were asked to respond to these
tics and to the adequacy of those items and sources which would best
ose characteristics on a 4.0 scale. The Task Force has generally
3.0-4.0 is a positive opinion. Below that, interest in the character-
indicator, or the source is low. Since you do not have the ratings in
u (and they'd probably be distracting if you did), I want simply to
ome of the absolutes and some of the anomalies of our findings about
students. Then I want to discuss briefly the consequences of these
ctive to ETS to begin to develop an instrument.

l, deans from academic (i.e. humanistic studies programs) and
l/technical programs alike believed that faculty and students

were the sine qua non of master's level education. After that the opinions were not so predictable, at least for some of us. Let me look first at the faculty. While the quality of instruction was a highly desireable characteristic of quality of the program, the deans (academic, professional/technical, masters' only, Ph.D.) appeared to agree that any indicator was only marginally adequate for determining the quality of that characteristic.

While student advisement was a desireable characteristic (but not high except among Ph.D. program deans) again the indicators were judged only marginally adequate to describe the characteristic.

The difficulty of agreeing upon indicators for quality of instruction and student advisement is endemic to the profession. But it may be compounded by basic distrust of the sources by deans. Faculty and students do not seem to be totally reliable sources for graduate deans. More of this in a moment.

One of the more interesting anomalies among faculty characteristics is the emphasis placed upon scholarly and artistic contributions as opposed to professional activities. It may have been predicted that scholarly and artistic contributions would be regarded as a more desireable characteristic by "academic" deans, particularly those who also administrate Ph.D. programs, and that professional activities (particularly consulting) would be more highly regarded by professional/technical administrators. But the fact that each characteristic for both borders on the marginal level of importance might not have been so predictable. Further, it is interesting to note that the adequacy of indicators and sources was rated slightly lower for professional activities than for scholarly and artistic contributions. Here we find a consistent attitude toward the adequacy of indicators. Those that can be quantified in

e.g. a bibliography of juried books and articles) are more adequate
ich may be more politically or economically driven (consultancies,
ice, offices in professional organizations).

the more significant characteristics (and one which the survey
gnificant) is commitment to the program. But here the indicators
ere adjudged almost totally inadequate. I attribute this to a
nguage in our initial instrument. It is something on which we need
what we mean basically is this: that quality can deteriorate in a
ich the teaching faculty of a department has lost control and interest
cus on baccalaureate or doctoral or other commitments.

training and experience of faculty is regarded as highly desireable
of quality by graduate deans at master's only institutions and
than that by those at Ph.D. granting institutions. Since training
are supposedly quantifiable, there is strong agreement that this
lity can be determined from useful indicators and sources. (From
perspective I find it amusing to see agreement that training and
matter where or what are generally acceptable so long as the highest
teaching experience, professional rank, and tenure have been
some point I personally believe we have to look at the quality of
perience. But that viewpoint ignores, of course, our whole concept
l achievement for adults; for after all, deans and faculty are adults
years. This is not the place to debate that issue.)

udents we have had more unanimous agreement among our colleagues
faculty. About all the deans agree to on being of principal

importance in terms of quality of students are credentials upon admission and commitment to and motivation within the program. But the administrators thought that allowing students to be the personal source for any information concerning their quality was of little importance in assessing the quality of the program. In short, the students were not considered to be essential in the process other than as the potential raw material on which the process should work. Whether this is a given within the system or whether it is a failure in understanding the possible contributions of one community in the system is a question that needs some answers.

Finally, plans after graduation and personal characteristics of master's level students appear to be of insignificant concern to our colleagues in determining the quality of their programs.

I would like to remind you that the Task Force with the help of ETS is engaged in designing an instrument which will be useful in assessing quality of individual master's programs, no matter their purpose. What we must do is work toward developing an instrument that will not only aid in describing what is but will also contribute to describing what should be. Again, the faculty and students are still the basic ingredients of the enterprise. But resources and the learning environment provide the fuel and the tensils, program content and alumni the recipe and the finished product. My colleagues Dean Fitzgerald and Dean Brown will discuss these issues.

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Task Force on the Assessment of Quality
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PROGRAM ASSESSMENT, MASTERS DEGREE

RESOURCES, AND THE LEARNING ENVIRONMENT...Characteristics

and Adequacy of Indicators and Sources

1/79 Panelist - "Assessment of Quality of Master's Programs)

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the early summer months of 1978, the Board of Directors of the Graduate Schools (CGSUS) appointed a Task Force on the of Quality of Master's Degree Programs. The primary task of the o develop an instrument for institutional use in assessment. ivity of the Task Force was to review and to revise, as , the "Dimensions of Quality of Doctoral Programs" instrument; sets ristics and indicators utilized by doctoral institutions were mended and projected for pilot testing for Master's programs. dified, and codified characteristics and indicators instrument d for distribution to the CGSUS membership for evaluation in draft and pilot instrument was distributed to 363 CGSUS s in early October of 1978 and the [illegible]zed results were pro- S in January of 1979 for revision of the characteristics by the sk Force membership. It is [illegible] to note that results were three groups: the "ma[illegible] institutions and programs by [illegible]led as "academic" and "professional/technical", by the [illegible]tutional programs as "academic" and "professional/technical", [illegible] of "academic" and "professional/technical". From [illegible] Task force members projected an instrument for individual al use which would reflect the characteristics, indicators and greatest assistance to individual institutions in the assessment

of the quality of graduate programs, at the master's level.

The sections of the questionnaire draft which I intend to preview are those of Programs Resources, and Learning Environments. The intention is to briefly review the characteristics and indicators which might be relevant for the four instruments.

Reports of the preliminary survey were reported as follows:

C. RESOURCES	Master's Institutions	Doctoral Institutions	All Institutions
Character-istics	Academic Prof/Tech	Academic Prof/Tech	Academic Prof/Tech

D. LEARNING ENVIRONMENT			
Character-istics	Academic Prof/Tech	Academic Prof/Tech	Academic Prof/Tech

With these sections, as is the case for the other four elements, - Faculty, Students, Program Contents and Procedures, and Recent Alumni, - differences in the institutional program profile and in the profiles of response from students, alumni, and faculty were anticipated. Unique differences might depend upon the (a) nature of the institution, e.g. master's and doctoral degree offered in a discipline, vis a vis master's only; and, (b) focus of the program and degree, e.g. academic or professional/technical.

The Institutional RESOURCES the Task Force identified are:

(1) Facilities and Services: ratings of adequacy of library holdings; equipment needed for teaching and research; space; course scheduling; departmental funds

(2) Administrative Support: ratings of campus a
support of the program; university procedure
development; adequacy of support staff; stud

(3) Support Services for Students: ratings of a
student housing; counseling; graduate assista
financial aids; health care; placement; parki
intellectual and social interaction

(4) Faculty: percentage of faculty with doctorat
number of full-time and part-time faculty; fa
for academic advisement; faculty collegiality

(5) Environment: opportunities for student-facul
the classroom structure; opportunities for co
teaching staff; collegiality between students
identification with program and participants

(6) Degrees: number of master's degrees awarded
Profile of entering students by academic disc
of baccalaureate degree; g.p.a.; years of empl

A brief summary of the pilot results indicates thai
Students" received the lowest ratings, among all categor
institutions indicating ratings lower than Master's - onl
The indicators of assessibility of graduate student hous
financial aids, etc., are evidently of least importance
within the framework of quality program indicators.

The next lowest ratings were reported in section (2
from the faculty questionnaire. This response may unders
paranoia resultant from the contemporary emphasis upon st
enrollment figures, faculty load determinants, faculty pe
faculty bargaining posture, etc. Please note the indicat
"administrative support" which may have influenced facult

In contrast, we may assume the comfort of campus eva
quantitative data...as evidenced in the highest ratings,

support with indicators easily assessible such as percentage of faculty with doctorates, tenured, full and part-time, etc. In short, where data could support indicators, the ratings appeared higher.

To oversimplify, - resource indicators which received highest ratings gave focus to faculty and facilities; administrative support and student services were indicators of least importance, and the general campus environment and degree programs ranging in the moderate area of importance in evaluations as reported.

LEARNING ENVIRONMENT characteristics and indicators included:

(1) Intellectual Environment: ratings of competitiveness among students; atmosphere conducive to rigorous intellectual effort; intellectual excitement; academic demands; opportunity to interact with persons employed in fields related to the degree program

(2) Interpersonal Environment: ratings of the extent to which different personalities and points of view are welcome; faculty concern for student development and collegiality; faculty advising and placement activities are adequate and viable

(3) Morale

a. Student satisfaction with program; rating of training as preparation for anticipated career; learning that has taken place; extent to which program delivers what was promised

b. Faculty satisfaction with employment conditions; ratings of departmental leadership; participation in decision-making; interaction with colleagues

(4) Enrollment: number of first year students; total number of full-time and part-time students; number of foreign students; opportunities for student collegiality

(5) Physical Environment: on-campus instruction; regular degree faculty participation in instruction; access to resources, e.g. library if off-campus courses; library hours and conditions appropriate for graduate study; parking and transportation compatible with hours of class instruction

characteristics, in descending order were: Intellectual
t, Morale (both student and faculty), Interpersonal Environment,
(mix), and the Physical Environment. Please note the indicators
support for the highest ratings and which result in the lesser
The middle-range indicators may demonstrate faculty dilemma or
about involvement in decision-making (sometimes thought to be
of administrators) the extent to which credibility is given to
al leadership and collegial interaction. A serious question to
d is the student assessment of the extent to which the promised
s or is delivered...consumerism and "truth in advertising".
very preliminary rankings show adherence to the tradition of
scholarship, with significantly less concern for student development
ment; with faculty morale focusing upon employment conditions
n upon the locus of instruction or resources available to faculty
nts.

period when post-secondary institutions totter on the brink of
demise of credibility, of constricted resources for libraries and
the scholarly tools, when capital expenditures can become a
h fight, when new technologies are token demonstrations...it is
ot surprising that learning environment characteristics have been
In this fashion. An exception may be the library resource.

onclusion, if I may personalize my position and perspective, I
a University in a large System which has created regions or clusters
or four universities for the purpose of pooling degrees and delivery
ional services; in my case, at the graduate level, only. The

Master of Business Administration (MBA, and AASCB accredited) as an example, is taught off-campus by regular faculty as a part of load. Print format and tele-communication/video tape instruction/computer resources "travel" with the faculty. These resources are portable, however, it remains to be seen and assessed...the extent to which "learning environments" beyond the professional area can be transported...to what extent can we stretch RESOURCES AND LEARNING ENVIRONMENTS for part-time, evening and weekend, students and faculty members. Is there a limit to providing a quality graduate program to an ever-expanding consumer?

STEPS TO QUALITY

Giles T. Brown, Dean of Graduate Studies
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third member of the panel, I have been asked to discuss characteristics in quality assessment which were iden- Task Force. These are (a) program contents and proce- recent alumni. In the survey previously mentioned, indicated strong support for using both of these in of master's programs.

ENTS AND PROCEDURES

delineation of purpose of the program is vital. Does researchers, teachers, and practitioners for responsi- business and the professions? Is personal enrichment the basis of level and nature of the instruction, can admitted to more advanced graduate study following grad- define unequivocally both the assets and limitations of an imperative if the spirit as well as the letter of advertising" laws and regulations are to be followed. unclear answers to such questions probably indicate a limination and organization.

by the variety and depth of the course offerings is an- characteristic of a good program. Is there provision ity to meet individual needs? Are there opportunities ve through such requirements as theses, projects, and vities? If internships, practica, and field experiences are students given the opportunity to rate the e assignments and the adequacy and helpfulness of the

A final area under this characteristic involves the substance of degree requirements. If a thesis is required, what are the standards for this product of independent research on the part of the student? Is there some type of a comprehensive or other terminal examination? Are other kinds of activities possible which might be called projects, internships, practica, or field experiences which have the common goal of utilizing the material learned? The presence of these unifying activities assures those who evaluate the program that the courses used to satisfy the degree requirements are not just selected at random, like boxcars attached to a train, but that they represent a coherent and cohesive whole. To assure that the material is both remembered by the student and is current at the time the degree is awarded, a time limitation within which all work should be completed has merit.

What assessments are made as students complete the program?

RECENT ALUMNI

Few would doubt that the alumni of an institution can provide an impressive amount of helpful information in the assessment of a graduate program concerning the effectiveness of the instruction, the currentness of the material, and the personal satisfaction derived from the experience. The high mobility in present-day society poses difficulties in obtaining responses from former students but the attempt is well worth the time and effort. Since programs and instructional personnel change, the alumni who graduated during the immediate five years should be an adequate base for the information desired. This limited period would also mean that the success in obtaining the responses would possibly be greater due to the availability and accuracy of the addressees. In addition, exit interviews,

where feasible, provide an excellent avenue for information that can not be readily obtained through the use of written surveys. At the doctoral level, several institutions have developed questionnaires for this purpose.

Questions which are germane include: How helpful was the degree experience in obtaining a new position or enhancing the possibility for advancement in the current one? What relationship did the degree work have to the individual's plan of career development? What post-degree achievements such as publications, awards, recognitions, participation in scholarly meetings and similar activities have been made possible by the degree? Is the alumnus satisfied with the educational experience, not only at the time the degree was received but in later months when a person has had the opportunity to evaluate from a longer viewpoint? What improvements would be recommended? The answers that alumni give to these and similar questions provide a rich source of information in identifying quality.